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ABSTRACT

This study examines the effects of recent statewide education reforms on small, rural schools in 13 Appalachian states. Education reform measures passed in the Appalachian states during 1982-1987 focused on improving schools through the following major approaches: (1) increased accountability through testing students and changing accreditation standards for schools; (2) higher minimum standards in schools and mandated curriculum improvements; (3) changes in teacher compensation, certification, and professional development; (4) new programs to improve administration and leadership; (5) mandated programs for special populations; and (6) increased state aid and changes in financial aid formulas. Forty-seven responses from a mail survey of 114 rural school districts and interviews with 80 state policymakers and local education officials indicate that (1) reform implementation has stretched the administrative and financial capacity of rural school districts; (2) new curricula requirements have forced innovative approaches such as teacher sharing between districts and the use of technology in classroom instruction; (3) student test scores have improved over the past four years, but dropout rates remain high; (4) programs for special populations have added to the resources of rural schools; and (5) despite large increase in state aid to rural school districts, school improvements have required increases in local financing as well. Appendices outline the research methodology, summarize education reforms enacted and implemented in each of the 13 states since 1982, present the survey results, and include the interview questions. The report contains 88 references. (SV)

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EDUCATION REFORM IN RURAL APPALACHIA

1982 - 1987

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Prepared for
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June, 1988

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EDUCATION REFORM IN RURAL APPALACHIA
1982 - 1987

EXECUTIVE SUMMARY

Introduction

As the education reform movement has swept the nation, the 13 states in the Appalachian region have been leaders in implementing education improvement programs. The Appalachian Regional Commission has long been deeply interested in fostering educational improvement in the region. A major concern of the Commission has been the effects of statewide education reforms on rural schools, particularly schools in very small, relatively remote rural areas. As a result, the Commission asked *State Research Associates* to conduct a three-part study. First, a comprehensive description of statewide education reform measures enacted from 1982 - 1987 was developed. Second, information on the impact of these reforms was requested from 114 school districts in small, rural communities throughout the 13-state region. Finally, interviews were conducted with state leaders and local officials to determine the perceived impact of state education reform measures on small, rural schools in Appalachia.

Purposes and Methodology of the Study

This study of education reform in rural Appalachia is designed to elicit information on the consequences of reforms in the schools—the impacts of statewide reform measures on students, teachers and administrators in small, rural school districts. Are improved educational programs being offered to students in rural schools as a result of statewide reforms? Are students achieving more, dropping out less? How have schools changed as a result of statewide education reform measures?

The study is also concerned with the impact of reform in the communities that support small, rural schools. Have these reforms changed public opinion about schools or the value of schooling in rural communities? Has statewide education reform required rural communities to increase financial support to the schools? Do communities take seriously the link between education reform and economic development activities? Finally, the study attempts to elicit perceptions among state and local leaders about the overall impact of statewide education reform on rural schools and suggests issues that are likely to be addressed in new education reform proposals as states and localities work together to improve education in rural areas in the future.

Because of the lack of objective data on the outcomes of statewide education reforms in rural areas, the approach to the study is to describe the various statewide reforms and to elicit opinions and perceptions of state and local political leaders, analysts and school officials about the impact of the reforms in rural schools. A combination of collecting information on the implementation of the reforms, surveys and interviews with state and local participants in the

educational process is used to piece together a picture of the impact of statewide reforms on small, rural schools in Appalachia.

Thinking About Rural Schools

The perception among state political and educational leaders that all schools — especially rural and inner-city schools — were failing provided the impetus for statewide education reforms throughout the Appalachian region. Rural schools exhibit several characteristics that set them apart from other schools, and may influence the ways in which statewide reforms affect schools, students and rural communities. Among these characteristics are:

- *Rural schools are more influenced by the economic and cultural outlooks of their communities than other schools;*
- *Rural schools reflect and shape the economic and social stratification of their communities;*
- *Rural schools embody pride in rural values, including discipline and hard work;*
- *Rural schools serve as more than just classrooms; they are the cultural and social centers of small town and rural life; and,*
- *Rural schools are often the major link between the community and the wider world.*

The context of implementing statewide education reform measures in small, rural schools is one of scarcity. Rural school districts face a scarcity of both fiscal and human resources and, more often than not, of economic and cultural opportunities. In rural areas of Appalachia, fiscal scarcity results from poverty, a weak property tax base and insufficient state and federal aid.

The scarcity of human resources in small, rural school districts involves a small administrative and community leadership base, a restricted pool of qualified instructional personnel and, often, the lack of a "critical mass" of students and teachers for certain course offerings.

Perhaps the most profound scarcity in some rural communities is one of hope for economic renewal, rooted in the lack of concrete economic rewards for academic achievement. In some communities, the lack of a clear and compelling link between education and economic opportunity erodes the motivation of students and challenges the schools as they attempt to improve student performance and reduce dropout rates.

Education Reform Initiatives in the Appalachia States: 1982 - 1987

Education reform measures passed in the Appalachian states during the period 1982 - 1987 were aimed at improving schools through the following major approaches:

- *Increased accountability through testing students and changing accreditation standards for schools;*
- *Higher minimum standards in schools and mandated curriculum improvements;*
- *Changes in teacher compensation, certification and professional development;*

- *New programs to improve administration and leadership;*
- *Mandated programs for special populations, including the gifted, the handicapped preschool children and students requiring remediation; and,*
- *Increased state aid and changes in financial aid formulas.*

Accountability in the Schools

The drive for accountability in the schools manifested itself through an emphasis on student testing, increases in standards for school accreditation and the enactment of school "bankruptcy" statutes. Accountability measures were also introduced for teachers. Fiscal accountability was improved through the imposition of more detailed reporting requirements and audits. Test scores were used not only to diagnose individual student performance but also to judge the performance of schools, districts and the entire statewide education system.

Raising Standards in the Schools

States in the Appalachian region also took actions to raise standards for high school graduation or college entrance, eliminate social promotion from grade to grade and to mandate more extensive course offerings or statewide curriculum improvements. In general, states expanded the number of courses needed to qualify for high school graduation, imposed minimum competency tests for graduation, increased the number of types of courses required to attend state universities and colleges and required new science, mathematics and foreign language courses for graduating students. States also required local districts to use test scores and other methods to identify students falling behind, discouraged social promotion and mandated remedial programs. States also mandated curriculum changes throughout the school system, requiring that schools offer more specialized and advanced courses, especially computer science, mathematics, foreign languages and social studies.

Teaching and School Reform

An enduring goal of the statewide school reform movement has been to improve the profession and practice of teaching. State education reform measures relating to teachers and teaching included improving and changing teacher compensation, enacting measures to encourage the recruitment and retention of qualified teachers, improving the professional development and training of teachers and implementing efforts to improve instructional practices.

Teacher compensation was increased significantly throughout the Appalachian region during the period 1982 - 1987. In many states, proposals for changing the way teachers are compensated were also considered. Career ladder and merit pay plans were implemented through pilots and demonstrations, but few states implemented these proposals statewide. Most states also took actions to encourage young people to enter the profession of teaching, enacting scholarship and loan programs for prospective teachers. Part of the rationale behind teacher pay increases and proposals for career ladder programs was to retain good teachers as well.

States also enacted measures to tighten teacher certification requirements and to improve professional development programs for existing teachers. Teacher competency testing became widespread as did requirements for more substantive courses for teacher certification. In many states, probationary periods for new teachers were required and alternative certification was made available to talented potential teachers without education degrees. Most states increased requirements for current teachers to upgrade their skills through participation in professional development programs.

Most of the efforts of state policymakers to improve instruction involved reducing class sizes and increasing classroom time. States enacted measures to increase the length of the school day, ensure that instructional time in the classroom was not eroded by outside activities and add teacher aides to help teachers with routine classroom duties.

Improving Administration and School Leadership

Education policymakers recognized that improving the management and leadership within schools is extremely important to improving educational performance. As a result, all states in the region took action to improve administration and leadership, focusing particularly on school principals. A variety of institutes and training programs were created to help administrators learn the latest techniques of school management. Emphasis was placed on the principal as an instructional manager. States also encouraged local districts to improve financial accountability and efficiency. In some cases, states encouraged local districts to consolidate schools or districts.

Programs for Special Populations

State education reform measures also emphasized providing services to special populations, especially gifted and talented students, the handicapped and those requiring remediation. Programs for the handicapped, especially special education programs, had been put in place during the 1970s and were expanded through education reform measures during the 1980s. A special feature many state initiatives was attention to gifted and talented students. Local districts were required to provide special instruction for gifted students and statewide programs, such as Governors' schools, were expanded. In addition, dropout prevention and early childhood development became part of statewide education reform packages, although neither issue was comprehensively addressed during the first waves of education reform in the 1980s.

School Finance

State education reform measures included large infusions of state education aid to local districts, mostly to pay for increased teacher salaries. Nevertheless, state education aid failed to keep up with rising costs resulting from reform, forcing many local districts to increase their fiscal effort. State education reform mandates often helped local school officials justify increases in local financial support. Especially in states that did not adjust school aid formulas to aid the poorest local districts, statewide school reform measures helped put considerable pressure on local finances.

Implications of Statewide Education Reform for Rural Schools: Perceptions of State and Local Officials

State and local officials believe that statewide education reform efforts have had far-reaching effects on small, rural schools in Appalachia. Responses from a mail survey and interviews in ten localities and 13 state capitals indicate that these effects include:

• *Implementation of education reforms in small, rural schools has stretched the administrative and financial capacity of rural school districts.*

The pace of change mandated by the states has stretched rural school administrators as much as the individual requirements of school reform. Paperwork increased significantly in the first few years but has levelled off. State efforts to reduce paperwork as well as state and local efforts to computerize record keeping are having a helpful effect on controlling the paperwork burden. Central administrative personnel in small, rural school districts are especially burdened with administrative problems resulting from education reforms because administrators in small districts play many roles that are delegated to others in larger districts. Principals in small, rural schools feel more responsibility for managing instruction effectively than before the reforms. Testing appears to play a role in focusing the attention of principals and teachers on student performance. Principals are also concerned about paperwork and reporting requirements taking them away from instructional management. Pressures for improved performance in the schools has put a premium on school leadership and on community leadership to promote the implementation of school reforms.

• *Changes in the classroom—including curriculum reforms, new instructional practices and expansion of programs for special populations — have affected the way schools are managed, the way teachers teach and have improved student performance.*

These changes have also stressed small, rural schools. The most difficult aspect of these changes in the classroom for small, rural schools has been the requirement to offer more and different types of courses. Finding teachers and facilities for these new curricula requirements has caused education officials in rural districts some difficulties. To meet these challenges, rural school districts have begun to share teachers, use technology to receive instructional programs from outside the district and in some cases have been forced to consolidate schools or programs.

• *Programs to recruit and retain better qualified teachers and improve teaching methods will take longer to have an impact in rural districts than other reforms.*

Rural administrators report that they have not had great difficulty in finding teachers but they are concerned about upgrading the quality of the teacher corps in their schools. Rural school leaders are pleased with new requirements for professional development among teachers but are skeptical about the efficacy of career ladder or other merit pay schemes. Teachers and principals alike praise the new emphasis on time-on-task in the classroom and feel that the increased discipline required of teachers in using tests, preparing objectives and lesson plans is improving the quality of instruction. Test scores appear to bear out their optimism, but questions remain

about how significantly any of the school reforms have really affected the classroom environment and the performance of students.

• *Programs for special populations have added to the resources of rural schools and have had some success in meeting special needs among student who were left out of the mainstream of education in the past.*

First initiated in the 1970s, programs for the handicapped, especially special education programs, were expanded in nearly half the local districts surveyed for the study. Programs for gifted and talented students were expanded in over two-thirds of the school districts. Local school officials believe that community support for programs helping special populations has been strengthened by including gifted and talented students among the special populations. Remedial programs have become a central feature of most statewide education reforms as well. School officials are counting on remediation to help overcome educational deficits that have affected many students in the past. With an emphasis on testing and student performance, statewide education reforms have also begun to provide resources for remedial programs, so that educationally disadvantaged students will not be left behind. Remedial programs are especially important to small, rural school districts, and officials in those communities were generally in favor of devoting more resources to remediation.

• *Student performance is improving in rural Appalachia, according to school officials at both the state and local levels.*

Test scores have improved over the past four years in most small, rural schools. More time is spent on instruction, teachers are focusing more on specific competencies and knowledge. It is also possible that students in rural schools have become more proficient in taking tests. At the same time, most school officials believe that improvements in student achievement have been greater in the earlier years of reform implementation and may be leveling off.

Although student performance as measured by tests is improving, the performance of schools as measured by the dropout rate has improved little. Throughout the region, the dropout rate remains stubbornly high. Most statewide education reforms in recent years did not focus policymakers' attention directly on the problems of dropouts or potential dropouts. Although remedial programs and efforts to improve educational quality in the early grades are supposed to affect the dropout rate in the long run, at least so far these programs have had little success in reducing dropout rates. Much more will have to be done to prevent dropouts and to attract young people in rural areas back to school. Some state and local education officials believe that dropout rates are an indictment of the current organization and operation of traditional schools and classrooms. These officials believe that substantial changes will have to be made in the educational process itself before the dropout rate will respond significantly to education reform.

• *Statewide education reforms have included large increases in state aid to rural school districts in Appalachia, but these increases have not been enough to prevent school improvements from requiring increases in local financing as well.*

Most rural school districts are heavily dependent upon state aid, since local tax bases are not strong. Local tax increases were recorded in about half the school districts responding to the survey for this study. In about a quarter of the school districts, local bond issues were also approved. In responding to the fiscal pressures created by statewide school reforms, local school officials were able to gain community support for budget increases in part by "blaming the state" for mandated reforms. In addition, public support generated at the state level for school reforms helped local leaders in making the case for greater funding at the local level.

- *Public support for educational improvement in rural areas of Appalachia was strengthened considerably as advocates of statewide education reform measures made the case that education and economic development are importantly linked.*

At the same time, local school leaders believe that it is important for economic growth to provide opportunities in rural communities so that educational improvements are not simply routes out of rural communities. One reason why rural residents appear to support statewide reforms is that rural legislative, school and community leaders feel that they were involved directly in the design of those reforms at the state level.

The Future of Education Reform in Rural Appalachia

Experiences in small, rural school districts in Appalachia with the first round of education reform suggest that the next set of statewide education reform measures must address the following issues:

- *School finance reform.*

States will likely have to take a fresh look at state aid formulas to provide more resources to hard-pressed rural communities. At the same time, they will likely want to provide incentives for student performance improvement to all schools.

- *Changing the school and the classroom.*

For all their sweeping effects on school districts, teachers and students, few of the first round of education reform measures have had deep or far reaching impacts on the classroom itself or the process of learning. Future efforts to improve student performance and reduce the stubbornly high dropout rates may require a more far reaching set of reforms. These could include school-wide incentives for performance improvement, empowering teachers as instructional leaders, implementation of innovative technologies and more emphasis on student and parental responsibilities. Small, rural school districts may provide an ideal environment in which to make fundamental changes that will characterize the next wave of statewide education reform.

- *Governance and school district organization.*

During the next round of education reform, state policymakers will look more closely at how education systems are governed—at the state and the local level. They will consider changes

in local school governance, reducing the bifurcation of taxing and operating authorities for schools at the local level and will encourage school consolidation in rural areas where consolidation is necessary to induce efficiency and improved student performance.

- *Education and the family.*

Both educational research and common sense point to the family as the most important factor in improving education in America. Stresses on the family unit have grown and new demands for government action to assist families are growing. School officials, including those in rural schools, will be faced with responding to the needs of the family in the future. These needs may include new ways of stimulating early childhood development, providing after-school learning and recreation and — most importantly — changing parental and community attitudes toward schooling and learning. Reducing dropout rates will require changes in attitudes among students and parents. Confronting the issues of drugs, teenage pregnancy, teenage suicide and AIDS will also pose new challenges to school systems that already feel burdened by requirements of statewide school reforms. A central question for state and local policymakers and school officials alike will be the extent to which schools — including small, rural schools in Appalachia — will be asked to contribute to the solutions to these problems.

INTRODUCTION

During the decade of the 1980s, states have taken dramatic steps to reform and improve their schools. The school reform movement had been building momentum during the late 1970s, gaining force as governors and legislators began to emphasize the linkages between quality education and economic competitiveness. Spurred in part by the report of the National Commission on Excellence in Education entitled "A Nation At Risk", the school reform movement blossomed after 1983. In state after state, governors and state legislators worked with broad coalitions of citizens, business leaders, educators and others to design and implement statewide education reform packages. In some states, education has been primary focus of the governor and legislature for each of the last five years.

In the states served by the Appalachian Regional Commission, education reform efforts have been more strenuous than in most of the rest of the nation. The 13 state region includes counties in the states of New York, Maryland, Pennsylvania and Ohio which took steps to improve education during the 1970s and focused again on education in the most recent round of reforms. The ARC region also includes areas in the states of Mississippi, South Carolina, North Carolina, Tennessee, Georgia and Virginia, which led the nation in implementing education reforms in the early 1980s. In ARC states such as Alabama and Kentucky, education reform efforts occurred later in the cycle. Both states enacted programs that built upon the experience of other states in the region. In West Virginia, a major education reform was passed in 1988.

As an active participant in encouraging educational improvement, the Appalachian Regional Commission has a vital interest in the success of statewide education reforms. The Commission traditionally has been active in stimulating innovations in vocational education and, more recently, has focused regional attention on dropout prevention. The ARC is also concerned about the impact of statewide education reforms on small rural schools, since the communities served by these schools often lie at the core of the economically and educationally disadvantaged portions of the region. If state education reforms can be made to work in these very rural, small schools, then these reforms can exert a positive impact on the economic future of the region. Conversely, if statewide education reforms are dysfunctional in small, rural schools, they should be tailored to meet the need of rural residents.

The ARC region encompasses a large and diverse population and geography, including a number of communities that are rural by almost any definition. There are 305 rural, or nonmetropolitan counties in the Appalachian region, about one-fourth of which are considered to be sparsely populated or isolated rural counties. These nonmetropolitan rural and small center counties have an average population of about 12,000. As a focus for this study, the Commission staff identified 114 school districts including about 850 schools that serve very rural areas. In most of these districts, 60 percent or more of the population live in communities of 5,000 or fewer. Enrollments in these school districts averaged about 2,800 students. The average school serves less than 400 students. In these districts, about 330,000 children are served in grades K-12 throughout the Appalachian region.

In order to assess the impact of statewide education reform efforts on small, rural schools in Appalachia, the ARC asked *State Research Associates* (*SRA*) to conduct a three-part study. First, a comprehensive description of statewide education reform measures enacted from 1982 - 1987 was developed. Second, information on the impact of these reforms was requested in a mail survey from 114 rural school districts. Third, a series of interviews with both state policymakers and local education officials were designed to elicit perceptions about the impact of statewide reforms on small, rural schools. This report summarizes the findings of the SRA study and examines the special problems and opportunities confronting small, rural school districts in Appalachia as a result of education reform in the 1980s.

Chapter 1
PURPOSES AND METHODOLOGY OF THE STUDY

The purpose of this study is to examine the impact of statewide education reforms on small, rural school districts in particular and on rural districts throughout Appalachia in general. Specifically, the Commission asked *State Research Associates* to examine:

- *The consequences of reform in the schools.*

What has the effect of reform been on students, teachers and administrators? Are more educational programs provided to students? Has there been cost shifting among program areas? Have student achievement, attendance and retention improved? How have statewide education reform measures affected the operation of the schools?

- *The consequences of reform in the community.*

Has education reform required rural communities to provide more financial support for the schools? How has public opinion about schools changed as a result of statewide reforms? Do communities recognize a link between education improvement and economic development? Are rural communities supporting school reform other than financially?

- *The future of education reform in rural Appalachia.*

Given the impact of recent reforms on small, rural school districts, how can future efforts to improve education accommodate the needs of rural Appalachian schools and students? Are there particularly promising approaches that might be useful in other parts of the Appalachian region? What issues need to be addressed to ensure that the next wave of reform benefits small, rural schools?

A particular concern of the Commission is whether statewide education reforms have been adequately tailored to the unique circumstances of rural schools. Rural schools operate in a unique environment. Rural schools might have experienced severe difficulties in implementing reforms designed to apply to all schools in a state. E. Robert Stephens, professor in the college of education's department of education policy, planning and administration at the University of Maryland at College Park, warned recently, for example, that statewide reforms might founder on the mismatch between the resources of rural school districts and statewide standards. Addressing statewide education reforms, Stephens wrote, "It is the rural small-school component that will prove the Achilles' heel of the school-excellence movement unless this sector receives immediate attention."[1]

To examine the effect of statewide education reforms on small, rural school districts, *State Research Associates* undertook a four-part research and information gathering effort:

First, a comprehensive review of state education reform legislation and regulatory efforts was undertaken. This work resulted in the creation of a matrix of education reform measures that is reviewed in detail in the third chapter of this report, as well as a detailed listing of education

reform measures in each state in the ARC. The matrix and state summaries are found in Appendix 2.

Second, interviews were held with key state officials in each state capital in the region. Typically, interviews were held with top officials in the state education department, key legislators, members of the governor's staff and legislative staff members. The purposes of these interviews were to validate the matrix of education reforms, determine what problems and opportunities are perceived by state officials to confront small, rural schools and to ascertain where state policy may be heading concerning education improvement efforts in the future. In addition, state officials were asked to help select rural school districts where interviews might unearth both problems in implementing statewide reforms and innovative responses by rural educators.

Third, school district officials in each of the 114 districts were asked to complete a mail survey exploring the issues raised both by ARC and by state officials. Among the rural school districts, 47 responded, a reasonable response rate given the paperwork and other pressures now burdening local school officials.

Finally, personal interviews were held in ten small rural school districts in nine of the thirteen states in the Appalachian region. Five of these districts were included in the mail survey. Typically, each round of interviews included the school superintendent, a principal, one or more teachers, a representative of the local taxing authority and often a school board member.

A total of 52 school districts participated in the study, as did officials from all 13 states. Interviews were conducted with 80 state and local officials.

From these sources, *State Research Associates* was able to piece together a mosaic of how small, rural school districts are responding to statewide education reforms in the Appalachian region. Like all mosaics, this portrait is somewhat sketchy, since it relies primarily on the perceptions of the people involved in implementing the reforms and running the educational enterprise in small communities. Neither ARC nor *SRA* expected that much empirical evidence about the success or failure of the reforms would be available this early in their implementation, nor was much found. State officials report, however, that statewide test scores and other evidence have been disaggregated enough to help guide conclusions about the impact of education reform on small, rural schools. Most of the information for this report, however, derives from the perceptions of people in the state capitals and working in small, rural schools.

SRA found a willingness among practitioners in small, rural schools to describe their experiences in implementing reform programs, to detail their perceptions of the effects of changes on the schools and to speculate on the future impacts of those changes. In the process, both state and local officials expressed both optimism about the effects of the reforms and deep concerns about the direction of future reforms. The rural school environment is unique, they said, and future reforms need to account for the special circumstances confronting rural students, faculty and administrators.

Chapter 2
THINKING ABOUT RURAL SCHOOLS

At first glance, most rural schools seem familiar to anyone who has attended public schools in the past thirty years. Walking through a high school in Crossville, Tennessee, or Iva, South Carolina, seems much the same as attending a suburban high school twenty or thirty years ago. The same concrete block construction, student lockers lining the walls, the babble of students as they change classes, all reflect the common experience of building and organizing schools throughout the latter part of this century. Yet beneath the surface similarities lie significant differences, rooted primarily in the economic and social circumstances of students, faculty, administrators and the support systems that nourish rural schools. The internal environment of the small, rural school is quite different from the environment experienced by students, faculty and administrators elsewhere in America.

Like most other aspects of the social environment, these differences can be traced to the economic and social characteristics of rural America, many of which are particularly stark in Appalachia. Small, rural schools in Appalachia reflect the circumstances of their communities. In particular:

• *Rural schools are more influenced by the economic and cultural outlooks of their communities than other schools.*

Small, rural schools tend to reflect the economic and social outlook of their communities even more so than their urban and suburban counterparts, primarily because of their geographic isolation and the history of economic deprivation in many areas of rural Appalachia. Deep in coal country, where jobs have been disappearing and few new jobs are replacing them, the schools must deal with the conflict and despair within these communities. The effects of this reality are not mitigated by a neighboring city or suburban area where economic activity is more healthy. At the same time, in northern Georgia or Appalachian South Carolina, where jobs are plentiful although wages are low, the schools reflect an optimism borne of recent economic growth. Attitudes toward education are changing in these communities, reflecting new hope that educational achievement can lead to better jobs within the community.

If the local economy is depressed, so often is the community spirit which is reflected in the outlook of the rural schools. School finances are tight. Most important, the hope of students to find rewarding careers near their homes is slim. The benefits of education are seen not in better jobs but in the chance to escape. These circumstances burden the rural schools, adding to the stress on the education system, even without the challenge implementing statewide education reforms. In areas where economic development is occurring, rural schools also reflect community attitudes. Many new jobs in these areas may not require a high school education. If new jobs are mostly low-skilled and call for little education, it may be difficult for community and school leaders to convince the public that economic development and education are closely linked.

Rural schools also operate in a setting in which traditional rural values are a substantial influence on students, faculty and administrators alike. In areas where farming is no longer economically feasible for most people, rural communities still relate many of their cultural activities and social events to farming. Hunting, fishing and other activities related to the land are extremely important to the people living in rural communities. Even when there are few jobs in the local area, people in Appalachian rural communities remain rooted to the land and the places where they grew up. They will commute long distances rather than move their families into other environments. Since traditional farming and "living off the land" did not require high levels of educational attainment, even in areas where newer, higher skilled jobs are being created, the relationship of rural culture and the linkages to the land may mitigate against special efforts to improve rural schools.

In rural Appalachia, as in much of rural America, economic and cultural isolation poses an enormous challenge to the schools. This challenge is to motivate and inspire students to high standards of academic performance when all too often the rewards are neither tangible nor evident in their own communities. The challenge is also to use scarce resources to improve education for the long-term benefit of rural residents, even when the short-term economic and social rewards of education seem elusive.

• *Rural schools reflect and shape the economic and social stratification of their communities.*

In a small community, everyone knows who is rich, who is poor and who belongs to the middle class. Poor children are usually very, very poor. Children from wealthier families in small communities are usually not very wealthy, compared to their urban or suburban counterparts. Children in families from diverse economic circumstances attend the schools, and school officials bring to the classroom expectations about students, sometimes based on their family backgrounds. Students benefit and suffer from these expectations. The anonymity of urban or suburban schools is missing in rural schools. This circumstance can be a blessing for an individual student or a curse.

The social and economic structure of small communities affects not only expectations about student performance but also the operation of the schools themselves. In some very depressed counties, for example, the school system is the largest employer. Unlike many urban and suburban settings, teaching in small, rural areas is a high-status occupation. The schools are major employers and school leadership is often an important part of the political and economic elite of small communities.

• *Rural schools embody pride in rural values, including discipline and hard work, held dearly by the community and the school system.*

Small, rural schools are usually operated in a more disciplined fashion than urban or suburban schools - both in terms of student discipline and expected behavior of the faculty. Traditional values taught at home and expected in the community are reinforced in the schools. Although the influence of the outside world can be found in spreading drug abuse, juvenile involvement in crime, and other social problems, discipline and hard work are still valued highly in small, rural communities.

As a result, some teachers prefer to work in these schools because they find a classroom environment which is easier to manage. The discipline and order within the small, rural school is a major advantage to some. To others, greater strictures on behavior in the rural schools imply limited creativity and reduced flexibility to experiment with alternate approaches to learning. Because of this more orderly environment, however, clearly defined changes in educational programs requiring strict local implementation may be implemented more easily in the rural school.

• *Rural schools serve as more than just classrooms; they are the cultural and social centers of small town and rural life.*

Rural schools are centers of community spirit and provide many of the cultural services offered by other institutions in urban or suburban settings. Music, dance, sports and other cultural and recreational activities are centered at the rural school. Urban and suburban residents will usually choose from a large number of providers of cultural and recreational activities. In small towns in rural Appalachia, the rural schools are the only providers of many of these cultural, recreational and athletic events. Rural schools are more than just educational institutions. They have become community centers, rallying points for community activities and generators of a host of community-based groups.

• *Rural schools are often the major link between the community and the broader world, offering an outlet to possibilities in the larger community, state, nation and world.*

Just as rural schools are a focal point for rural communities, rural schools are also among the few institutions in rural America that give students and adults access to the broader world outside the town, county or region. Other than television, which provides an ubiquitous if distorted view of the outside world, no other institution connects the residents of isolated rural areas to the rest of the world as much as the school. This is accomplished through scholastic and athletic competition, field trips, current events courses and inter-school exchanges. A major function of the rural school is to broaden opportunities of students and the community to interact with the wider world.

The rural school must cope with isolation, sometimes economic scarcity and despair, and at the same time must motivate students to learn and prosper in the larger world. Many rural schools play a dual role. On the one hand, rural schools stimulate pride in a small community and try to offer hope of economic fulfillment at home. On the other, small rural schools may be the major vehicle through which the majority of a community's young people become educated enough and aware enough of outside opportunities to decide to leave.

Schools in small, rural areas focus primarily upon educating young people, but they also play many other roles in the life of a rural community. Indeed, the operation of a small, rural school, by virtue of its size and geographic isolation, is so intertwined with the community that problems encountered by rural schools reflect the same problems encountered within the rural communities they serve; most of these problems relate to scarcity.

Scarcity and the Rural Schools

As the first wave of education reform swept across the Appalachian states during the 1980s, rural schools have attempted to implement reforms within the context of scarcity. Like their economies, rural schools are suffering from years of underinvestment. Faced with the human and fiscal resource constraints of rural communities, rural schools have had to try to improve educational opportunity and student performance in the context of extremely limited resources. Rural schools must overcome three types of scarcity as they attempt to improve education in response to statewide education reforms:

- *Scarcity of fiscal resources;*
- *Scarcity of human resources; and,*
- *Scarcity of economic and cultural opportunity.*

Economics, Resources and Rural Schools

Throughout the Appalachian region, the resource base for schools has grown more slowly than in the rest of the nation. Never strong, the Appalachian economy has been sluggish at best in recent years. A combination of the decline in manufacturing in the "Rustbelt" part of Appalachia, the devastation of the farm economy and the reduction in energy and other extractive or natural resource-based economic activity has hit rural Appalachia hard. Table 1 compares the Appalachian region's economy to the rest of the nation in the mid-1980s.

TABLE 1
POVERTY, INCOME AND UNEMPLOYMENT
IN COUNTIES WITHIN THE APPALACHIAN REGION
1980, 1984, 1984-86

State	Poverty Rate (1980)	Market Income Per Capita (1984)	Unemployment Rate (Avg. 1984-86)
ALABAMA	16.6	$8,625	9.7
GEORGIA	12.3	9,994	5.8
KENTUCKY	26.0	6,040	12.8
MISSISSIPPI	22.1	6,774	11.2
NEW YORK	12.0	8,765	6.8
NORTH CAROLINA	13.8	9,221	6.0
OHIO	12.9	7,832	11.8
PENNSYLVANIA	10.0	8,951	9.9
SOUTH CAROLINA	12.6	9,452	6.3
TENNESSEE	16.6	8,070	9.2
VIRGINIA	15.2	7,381	10.6
WEST VIRGINIA	15.0	7,649	13.1
ARC REGION	14.0	8,462	9.5
UNITED STATES	12.4	11,008	7.2

SOURCE: Appalachian Regional Commission

As Table 1 indicates, despite some progress the ARC region as a whole continues to lag economically. Poverty rates are higher than the national average, while market income is lower. Unemployment in the region averaged over two percentage points higher than the national average. In rural areas of Appalachia, this economic stagnation is even more severe than in the region as a whole.

In rural areas of Appalachia, economic difficulties are exacerbated by significant dependence on manufacturing and extractive industries. Both sectors have been hard hit during the 1980s. As a result, the underlying economic situation in many small, rural communities has made it difficult for rural schools to obtain local resources for school reform efforts. In addition, the cloudy economic forecast for small, rural communities has affected the outlooks of both the students, faculties and administrators and the larger communities which must provide resources to operate the schools.

Fiscal Resources

There are three factors creating the fiscal resource scarcity that confronts many rural school districts in Appalachia:

• *The local tax base is limited.*

In all the Appalachian states, the main source of local funds for the schools is the property tax. The property tax is based on the wealth in rural communities, a wealth that has been growing only slowly or has been eroding as farm land values declined and as the energy-based businesses in parts of Appalachia have struggled to survive. Table 2 shows the property tax capacity in those states. For every state in the Appalachian region, the per capita property tax capacity is below the national average of $435.

TABLE 2
PER CAPITA PROPERTY TAX CAPACITY, 1985

State	Amount ($)
VIRGINIA	427
MARYLAND	427
NEW YORK	406
PENNSYLVANIA	391
OHIO	386
NORTH CAROLINA	382
GEORGIA	369
TENNESSEE	337
SOUTH CAROLINA	321
WEST VIRGINIA	317
KENTUCKY	310
ALABAMA	308
MISSISSIPPI	298
NAT'L AVG.	408

SOURCE: Advisory Commission on Intergovernmental Relations, *Measuring State Fiscal Capacity*, 1987 Edition.

While conditions in the Appalachian portions of these states may vary slightly, the overall situation is clear: small, rural schools rely on the property tax for much of their local resource base and the property tax base is weak. Economic activity in these communities is often stagnant or, where growing, relies upon low-wage, relatively unskilled jobs. Even in rural communities that are growing, sales and income tax bases usually grow faster than the property tax base. Property tax abatements are often used to help attract new industrial facilities and often the added

wealth brought to a community by a new factory or other facility does not fully compensate for the added costs to the schools.

• *Federal aid has been declining in relative terms. State aid has increased but is not always distributed to equalize educational resources.*

Many of the small, rural school districts in Appalachia have been more dependent upon federal compensatory education aid than most other school districts in their states. As these funds have been capped or reduced through federal budget cutbacks, adjustments in school budgets have had to compensate for these reductions. In most cases, state and local resources have been substituted to compensate for the reductions or caps on federal aid.

Many small, rural school districts are heavily dependent upon state aid to local education. State aid for education has grown throughout the period of education reform, but state aid has not provided enough new revenues to finance education improvement efforts without additional local effort. State aid increases have not kept up with rising costs in rural schools, especially those costs resulting from implementation of statewide school reform measures.

• *Private sector resources, which often supplement school budgets in urban or suburban districts, are scarce in rural communities.*

Although rural communities exhibit a rare cohesion among private businesses and community leaders, the ability for the private sector to enhance educational or cultural opportunities in small, rural communities is limited. Corporate sponsorship of cultural events is scarce or unknown. Local fraternal or other organizations may sponsor contests, support the local library or school programs related to agriculture or mining, for example, but the resources for private businesses to make major impacts on the schools are extremely limited. Corporate headquarters will be found in none of these small communities and corporate largess has seldom been an option for enhancing the educational or cultural programs in rural Appalachia.

Human Resources

In conjunction with the scarcity of fiscal resources , the scarcity of human resources compounds the problem for small, rural schools. Recruiting qualified administrators, teachers and support staff for the schools is a major challenge for small, rural school districts. As with fiscal resources, the problem of scarcity in human resources manifests itself in several different areas:

• *Administrative leadership and community leadership depend upon a small group of people.*

Leaders on the Board of Education and in parent or community support groups are drawn from a small group in rural areas. Although these leaders are dedicated and work hard, the effect of drawing from a small pool of leaders is that the leadership may become tired or that the routine of maintaining a school system may become paramount. Because community leaders in rural areas are often stretched so thin, innovation or change in the schools may be viewed as a difficult if not unwelcome task.

In addition, school administrators in small, rural districts must play a variety of roles. The superintendent, for example, must manage not only the principals and faculty in the schools, but also the transportation, purchasing, athletic and other functions of the school system. When new standards and mandates emerge from the state capital, administrators may be hard pressed to respond. Faculty members in small, rural schools may also be stretched. Many teachers are required to teach courses in several different fields, sometimes in areas totally outside of their field of certification.

• *Recruiting good teachers and maintaining professional standards among teachers is a continuing problem in rural areas.*

Despite reports to the contrary in the national media, teacher recruitment in rural areas appears not to be a major problem. Rural school districts find that teachers are available, but administrators in many rural schools are uncertain about the quality of teachers, especially in secondary schools. In specialized areas, such as science, art and mathematics, rural school districts have difficulty in recruiting qualified teachers. Despite some of the advantages of teaching in rural schools, many young teachers want to live in metropolitan areas.

Keeping existing teachers up-to-date in their fields is also a constant problem in rural schools. Many rural school teachers operate small businesses, work second jobs, coach or contribute to community enterprises during the summer and in off hours. Without resources to finance "in-service" training and updating skills, rural teachers have less opportunity to upgrade their skills or to keep up with the latest information in their fields than do teachers in urban or suburban school districts.

• *In many cases, not enough students or teachers are available for particular courses or educational programs.*

Small schools and small school districts mean that the pool of teachers and students is limited. As a result, the variety of course offerings must be limited as well. If only five or six students qualify for learning calculus, for example, the school may not be able to afford to hire a teacher of higher mathematics. As Gerald Bass of Oklahoma State University has written, " When enrollments are small, there is a difficult choice: offer classes with very low pupil-teacher ratios or not offer the classes at all." Bass points out that "even when small districts develop cooperative programs to share instructional resources, transportation and other expenses continue to create relatively high per pupil costs."[2]

The problem of "critical mass" for educational programs is one reason why course offerings are limited in rural schools. In several of the reform packages in the Appalachian states, statewide mandates for course offerings in the sciences and foreign languages were designed to force school districts to broaden their offerings to students. In addition, some state policymakers apparently hoped that increasing requirements on rural schools would force consolidation or at least sharing personnel and students among very small districts.

Culture, Economic Opportunity and Motivation

Perhaps the most profound issue confronting small, rural school is the relationship between economic opportunity and motivation. Students in rural areas are often disciplined and hard-working, but their social and economic environment is one that rarely pushes them toward outstanding achievement. For a significant fraction of students, family life is disabling. Many parents have little education themselves and communicate low educational expectations. If a parent does not have a high school education, for example, graduating from high school may be an important improvement in the history of the family. But going to college may simply be out of the range of possibility, not only for economic reasons but also because family expectations are not high.

At the same time, ties to the community are quite strong. When family and community ties, combined with a stagnant economy, erode the hope of students for a better future, motivation for high academic achievement is difficult to stimulate. Despair is difficult to overcome when the economy of rural areas offers little hope for students who wish to achieve yet stay close to home. The avenues of entry into community leadership and the middle class of small communities are often blocked by a stagnant economy. This factor besets administrators, faculty and community supporters of schools.

Educational achievement is therefore often equated with escape from rural areas. The link between economic progress and education, while valid for the state or nation, can mean that good schools in small, rural areas simply promote outmigration. If rural economies grow, however, good schools can become the training grounds for a new generation of rural leaders and a well-educated workforce to fuel economic progress.

Scarcity in Rural Schools: The Context for Education Reform

The scarcity of fiscal, human and motivational resources in small, rural schools is the backdrop against which statewide education reforms must be viewed. Many of the elements of state education reforms during the 1982-1987 period were driven by the recognition that schools, especially inner city and rural schools, were not equipped to provide students with an education adequate to meet the current and future needs of the workforce and the society. Statewide mandates and increased standards were drawn with an eye toward the longer distance that rural schools had to go. Much of the debate about school reform has reflected an impression among policymakers that standards of educational performance have slipped over the years, and much of the systematic and anecdotal evidence of this decline related to small, rural schools.

Statewide education reforms raised standards, required increased accountability in the schools, provided for special programs for the gifted and the handicapped and required extensive testing of students and teachers alike. The effect of these reforms on small, rural school districts in Appalachia is the subject of this report. The story of the response by small, rural schools to education reform is one of meeting the challenges of education improvement in an environment of scarcity.

Chapter 3
EDUCATION REFORM INITIATIVES IN THE APPALACHIAN STATES: 1982 - 1987

Statewide education reforms enacted since 1982 in most of the Appalachian states included an emphasis on increased accountability in the schools, coupled with a variety of measures to assist teachers and train administrators. The basic approach of the first wave of education reform in the 1980s was to raise standards, provide more resources for schools and teachers and mandate a variety of new programs for students. The focus of these reforms was to improve the current mode of operation in school systems rather than radically restructuring the way in which education was delivered. Common elements of education reform measures in the region include:

- *Increased accountability through testing students and changing accreditation standards for schools.*
- *Higher minimum standards in schools and mandated curriculum improvements.*
- *Changes in teacher compensation, certification and professional development.*
- *New programs to improve administration and leadership.*
- *Mandated programs for special populations, including the gifted, the handicapped and preschool children.*
- *Increased state aid and changes in financial aid formulas.*

Accountability in the Schools

Gubernatorial and legislative attention to education in the Appalachian region during the 1980s reflected changes in public attitudes toward the schools. During the 1960s and 1970s, state policymakers provided resources to the schools without much attention to performance. Education was considered to be the province of educators, and political leaders debated the allocation of resources among competing priorities such as highways, human services, health care, higher education and elementary and secondary education. They seldom intervened in the educational process itself. With the advent of widespread public disillusionment with the performance of the public schools, however, governors and legislators began to scrutinize not only the resources allocated in state budgets to the schools but also the process of schooling itself.

As political leaders began to look closely at the schools, they found that few measures of performance were available. For a variety of reasons, few statewide tests were used to judge student performance or compare the effectiveness of school districts. Responding to public skepticism about the quality of the existing education system, legislators and governors tied new resources to testing and other accountability measures. As a result, nearly all of the education reform programs enacted since 1982 in the region included extensive student testing and some reform packages included teacher testing as well. State mandates for increased student testing were enacted in 12 of the 13 Appalachian states. Minimum competency testing for high school

graduation was mandated in 8 states in the region, while testing of students for promotion was required in 4 states.

The drive for accountability in the schools through testing took two forms: measures of individual achievement and measures of school-wide or district-wide performance. State officials focused first on individual accountability. State officials feared that social promotion and pressures to pass athletes, as well as low performance standards generally, were allowing many students to complete school without the basic skills needed to compete in the economy. This fear motivated them to mandate minimum competency tests for high school graduation.

When educators and others noted that the seeds of such problems began in the early years of education, a number of tests were mandated in earlier grades. If students were not performing well, policymakers reasoned, their problems could be identified early and corrected. In North Carolina, for example, the State Board of Education in 1985 required that students score above the 25th percentile in achievement and competency tests administered in grades 1, 2, 3, 6 and 8 in order to be promoted. In Mississippi, students are tested on competencies in grades 3, 5, 8 and must pass a minimum competency test in grade 11 to graduate. In Georgia, the 1985 Quality Basic Education Act required comprehensive student assessments including the use of nationally norm-referenced tests for grades 2, 4, 7 and 9. State standardized tests are also required in Georgia for grades 1, 3, 4, 8 and 10.

In Tennessee, basic skills testing was implemented in 1985 for grades 3, 6 and 8, and in Ohio, competency testing for basic skills is administered once each in grades 1-4, 5-8, and 9-11. Most state testing programs were linked to remedial education requirements. Students not performing well on standardized tests were required to receive some form of remedial or special attention.

The second, and perhaps most controversial, aim of expanded testing programs throughout the region was the possibility of comparing the performance of school districts and even individual schools. In Tennessee, then Governor Lamar Alexander announced his attention to "grade" every school in the state as part of statewide education reform. New York state requires all public and non-public schools to prepare an annual "Comprehensive Assessment Report" on student progress in all State testing programs and to make the report public. The state requires corrective action for low performing schools. In Pennsylvania, the Department of Education has begun to publish school-by-school reports of various measures of success, beginning with the tests of reading and mathematics for third, fifth and eighth graders, drop-out rates, going to higher education rates, student attendance rates, participation in advanced placement, rates of mastery of vocational skills tests and library usage.

Among all the education reforms enacted during the decade, the imposition of widespread student testing probably has had the most impact in the school and the classroom. In many states, testing begins in kindergarten and ends upon high school graduation. Despite fears that too much testing would corrupt the educational process, the additional testing mandated by statewide education reforms seems to have been accepted as a regular part of schooling throughout the region.

Other forms of accountability were also imposed as part of school reform. In three states, school district "bankruptcy" statutes were enacted. Under these laws, poor performing school districts could be put in "receivership" by the state and could be operated by state officials until performance improved. In South Carolina, education reform legislation addressed criticism of comparing schools with differing student populations by creating five "bands" of schools based on the social and economic characteristics of student populations. Within these bands, schools are not only compared, they are rewarded financially for good performance and may be declared academically bankrupt if they fail to improve low performance.

In Georgia, each public school is evaluated every 5 years. Schools are compared to others with similar characteristics. Effective 1987, low performing schools must develop corrective action plans. If satisfactory performance is not made toward improvement, the State may file a civil action and the local superior court may have a trustee appointed to operate the school system. Since 1985, the Kentucky Department of Education has been authorized by the state legislature to intervene in local school districts which fail to achieve minimum levels of academic accomplishment.

School accreditation standards have been upgraded in several of the Appalachian states as well. Mississippi's 1982 Education Reform Act required that the new Board of Education totally redesign the school accreditation system, basing accreditation on school performance rather than on inputs. North Carolina's Basic Education Program required the State Board of Education to use accreditation as a means of insuring compliance with the Basic Education Plan. In West Virginia, accreditation of county school districts was required for the first time in 1983-84. Fiscal accountability was also upgraded in many school reform programs. New reporting requirements associated with increased accountability significantly increased the paperwork burden on school districts and imposed tighter accounting for the uses of funds.

Raising Standards in the Schools

Statewide education reform efforts rested not only on increasing the accountability of the schools but also on raising minimum standards and mandating curriculum improvements. Several types of actions have been taken to raise standards within the schools. These included:

- *Raising standards for high school graduation or college entrance,*
- *Raising standards for promotion from grade to grade, and*
- *Mandating more extensive course offerings or statewide curricula.*

During the first wave of education reform, raising standards appealed to state leaders, because statewide action could combat perceived laxity in some schools without necessarily raising costs or causing structural changes in all the schools. In addition, the tradition of state regulation of education had focused on minimum standards rather than upon educational outputs. In many states, the state government was considered primarily a guarantor of minimum standards rather than as responsible for educational achievement statewide. As a result, standard-raising became a popular and extensive part of nearly every education reform package enacted in the region.

Graduation and College Entrance Standards

During the first wave of education reform, all states in the Appalachian region strengthened in some way their standards for high school graduation. In Maryland, for example, the Board of Education changed the distribution of the 20 minimum credits required for graduation by decreasing the number of electives and increasing the requirements for math and science. In Alabama, minimum credits for graduation were increased, and requirements were specified for both standard and advanced diplomas. In addition to specifying minimum requirements for each broad discipline, the State Board of Education required specific courses.

These types of changes were typical throughout the region. Particular emphasis has been placed on increasing math and science requirements, and overall credits required for graduation have been substantially raised as well. In some cases, math and science credit requirements have doubled and even tripled. Several states have adopted systems with two-tiered diplomas - standard and advanced credits. Overall, more emphasis has been placed on college preparation.

In related actions, some state university systems also increased requirements for college entrance. In Mississippi, the state university system has increased the minimum score required on the ACT college entrance examination for entry into most state colleges. Virginia's higher education system has also increased its entrance requirements. The combined effect of increased higher education entry requirements and increased high school graduation requirements on the public secondary schools has been to require new course offerings for college bound students. Where college requirements have been increased to include foreign languages, physical sciences and more mathematics, small rural schools have had to meet not only curriculum mandates for all students but also to enrich their offerings in order to better serve college bound students.

Throughout the region, raising graduation requirements and college entrance requirements has probably affected small, rural schools more than other types of schools. By expanding the numbers and types of courses that must be offered, the reforms required small school districts to offer new courses, such as science, languages and higher mathematics, and to recruit teachers in subject areas where there had been little demand in the past. The effect of these standard-raising actions has benefitted rural students by broadening the availability of course offerings, although small districts have reported some difficulty in meeting the raised standards due to the small numbers of students enrolled in advanced placement courses and scarce resources.

Standards for Promotion

Attacking the fear of social promotion, many state education reforms during the 1980s mandated steps to ascertain student achievement at various grades and to block promotions of students who were not measuring up. Extensive student testing programs were implemented and tied to grade promotions. In addition, summer schools were expanded and remedial programs were required. In ten of the 13 ARC states, remedial programs have became important additions to schools, particularly in isolated rural areas. If academic deficiencies could be identified early,

the reasoning went, remedial programs could help students overcome problems and allow them to pass through the standard Carnegie units that structure nearly all the schools.

In North Carolina, for example, the Board of Education required that any student scoring below the 25th percentile on competency tests must attend summer school successfully in order to be promoted. Remediation was a key part of the 1985 reform in Kentucky which was enacted by the legislature. The reform program envisioned remediation beginning as early as the first grade, with intensive remediation available in grades one-three. In later years, as resources became scarce, policymakers in Kentucky began to question how students could fall behind as early as the first grade. In Mississippi, extensive remedial programs were enacted to overcome academic deficiencies identified by competency testing in both the elementary and secondary schools. In 1985 Pennsylvania required that a student whose performance falls below an acceptable level measured by competency tests administered in grades three, five and eight, must enroll in remedial programs funded by the Commonwealth. South Carolina, Tennessee, Maryland, Georgia and Alabama have also developed remedial programs linked to statewide competency testing.

These remedial programs were thought to be necessary not only because many students failed to measure up, but also to overcome the residual legacies of unequal educational opportunities among minorities and poor families in both rural and urban areas. If social promotion were to be eliminated and if high school graduation required a minimum competency, it was incumbent upon the state and local school systems to provide a means for students to catch up.

The implementation of extensive remedial programs has meant that a substantial number of new teachers and classrooms have had to be found in small, rural schools. Most remedial programs involve intensive, instruction and imply smaller class sizes and individualized help. In Virginia, for example, alternative education programs are to be provided by each school division for students whose needs are not met in the traditional classroom. While remedial programs were welcomed by most school administrators and teachers in small, rural areas, implementing these programs has caused some strain on school resources and resourcefulness.

State Mandated Curriculum Improvements

While most states mandated increased standards for graduation and other measures that required schools to broaden course offerings, the approach of state reform efforts to the content of the school curriculum has differed widely. One school of thought among state officials holds that if every child is to be offered an adequate education the state must ensure that course content be relatively standard, at least at a minimum level. In Georgia, for example, the Basic Quality Education Act required the creation of a standard, statewide curriculum to be used by all public schools. As part of the Basic Education Program in North Carolina, state school officials mandated not only minimum staffing requirements in the schools but also began to specify course content through the North Carolina Standard Course of Study. Kentucky specifies minimum skills required by grade and subject area.

A second school of thought casts the state education authority in the role of setting standards and providing technical assistance to local districts in updating and improving curriculum. In this case, while a state may require science or math courses and learning objectives for each, for example, it does not attempt to specify the exact content of the science or math curriculum. New York, Pennsylvania, South Carolina, Virginia, West Virginia and Ohio have stipulated curriculum objectives within the context of increased or modified credit requirements. In these cases, while increased state emphasis on competency and achievement testing does send strong signals to local educators about the expected content of basic courses, the state does not attempt to impose a statewide or standard curriculum on the system.

Many of the Appalachian states have required schools to offer particular types of courses. Not surprisingly, the most common requirement is for computer literacy or computer science courses. Ten Appalachian states have implemented special programs in computer literacy or computer science. Computer literacy is now a requirement in Alabama's public schools and must be offered to all students in Pennsylvania's public school system. North Carolina now provides, at state expense, one computer for every 26 students.

Other states have taken the planning and technical assistance approach to stimulating computer use in the schools. States such as Georgia have required that school districts develop long term plans for using computer technology to improve their academic and administrative performance. In Maryland, the state has joined forces with IBM to form the Maryland Educational Technology Network in five local school systems. Tennessee provides technical assistance to local schools through state staff.

Another ten states have added program enhancements through communications and technology. In Maryland, local technology plans have been implemented in the schools and state staff specialists provide training in the use of instructional TV. In Mississippi, a distance learning program using telecommunications and two-way video techniques was initiated in 1987. New York implemented new curriculum requirements in technology for grades seven and eight. Distance learning by satellite is being used in North Carolina to address the pupil and teacher shortages in math, science, and foreign languages. Pennsylvania has implemented a state-supported Telelearning project using the telephone and computer technology to teach students in 30 remote districts. Also, a statewide electronic communications network is connecting all Pennsylvania school districts, intermediate units and vocational schools.

Also adding to the more commonly found academic requirements have been such course offerings as world, U.S. and Virginia geography for students in Virginia, and the instruction about the "world of work" in Maryland. Kentucky has implemented an intensive writing program for grades seven - ten. Upgraded citizenship courses are now required in Virginia and Maryland.

Twelve of the thirteen states in the region have mandated curriculum improvements since 1982.

Teaching and School Reform

An enduring goal of those interested in school improvement during the 1980s has been to improve teaching. While acknowledging that many factors affect educational outcomes, school reformers focused considerable attention on teachers. Nearly every education reform package included measures to improve the compensation of teachers, change the way teachers are hired and promoted and address the competency of the teaching corps. In addition, most education reform packages included incentives for young people to go into teaching, emphasis on continuing education "in-service" training for teachers and other assistance with professional development among teachers. More recently, proposals for more teacher involvement in school management, better working conditions and more professional treatment of elementary and secondary school teachers have been advanced.

Education reform efforts directed at teachers and teaching can be grouped into the following categories:

- *Improving and changing teacher compensation*;
- *Improving the recruitment and retention of qualified teachers*;
- *Improving professional development and training of teachers*; *and*,
- *Improving instructional practices*.

Teacher Compensation: Higher Pay

Part of every education reform package considered by the legislatures in the region during the 1980s was an increase in teacher pay. Nationwide, average teacher salaries have increased by 5.4 percent in real terms (after adjusting for inflation) from 1977 - 1987. In all but three states in the region, teacher salaries are now higher than the national average. Table 3 shows average teacher salary improvements in the 13-state region from 1977-87.

TABLE 3
PERCENTAGE CHANGE IN AVERAGE TEACHER SALARY
1976-77 - 1986-87 IN CONSTANT DOLLARS

State	Percent
ALABAMA	18.7
SOUTH CAROLINA	17.1
GEORGIA	14.9
VIRGINIA	12.1
OHIO	11.4
KENTUCKY	9.7
MISSISSIPPI	9.7
PENNSYLVANIA	8.3
TENNESSEE	7.5
NORTH CAROLINA	6.0
MARYLAND	4.2
WEST VIRGINIA	-0.5
NEW YORK	-1.1
NAT'L AVG.	5.4

SOURCE: National Education Association, *Rankings of the States, 1987.*

State legislators passed a variety of programs either mandating salary increases or giving local school districts incentives to raise teachers' salaries. In many states starting salaries rose faster than average salaries, since policymakers were concerned not only about increasing the pay of existing teachers but also about attracting qualified people to the teaching profession in the future.

In order to understand the effect of statewide programs to raise teacher pay on conditions in small, rural schools, one must consider the various ways in which state policies affect pay and benefits of teachers. In the ARC region, two basic methods of school finance are used by states to provide resources for teacher pay. In several states in the southern part of the region, state governments tie state education aid directly to teacher salaries and mandate a minimum schedule of teacher salaries. Local school authorities must pay teachers at least what the state mandates and must provide a minimum complement of teachers per students. As a result, when the state changes the minimum teacher salary schedule and provides funds to implement that change, nearly all teacher salaries increase. Usually lacking collective bargaining at the local level, teachers in these states take their case for salary increases to the state legislatures. Salary increases are determined in the state capitals. This method basically obtains in North Carolina, Georgia, South Carolina, Mississippi, Tennessee, Kentucky and Alabama.

The second basic method of state financing teacher pay increases in less direct, but no less effective. In states such as Ohio, Pennsylvania, New York and Maryland, local collective

bargaining sets teacher salaries. In most school districts, the resources available for teacher salary increases are heavily dependent upon the level of state aid. In setting state aid levels each year legislators assume that teacher salaries will go up by X percent, although they do not usually mandate the change. Since salaries of instructional personnel constitute by far the largest fraction of total school budgets, when state aid rises it is likely that most of the increase will go into teacher salaries. This is especially true in large school districts with powerful unions.

In small, rural school districts, this linkage between increased state aid and salary increases may not be so automatic. Pressures to fund increases in school transportation, construct or renovate facilities and meet other needs may make it more difficult for rural teachers to receive raises in states that do not tie state aid directly to teacher salaries, such as Pennsylvania, than in the southern tier of ARC states. Nevertheless, teacher salary increases have been significant throughout most of the ARC region.

Teacher salary increases may have special significance in small rural schools because salary levels in the surrounding communities are relatively low. Especially in schools affected by statewide minimum teacher salaries, teacher salaries in small, rural communities in Appalachia may be relatively high compared to other salaries in rural areas. In Georgia, for example, the state legislature has set a general goal of making sure that teacher salaries are competitive. If "competitive" relates to salaries in the Atlanta metropolitan region, salaries of teachers in small, rural schools in Georgia will be highly competitive.

Some policymakers have expressed the belief that applying statewide salary schedules to rural areas will make teaching in small, rural schools more attractive to beginning teachers and to teachers with skills in special shortage areas. To be sure, higher salaries will help small, rural schools to attract teachers, especially young people from the community who have gone off for higher education and want to return. Whether higher salaries will attract teachers with no roots in small communities and rural areas seems more doubtful, since metropolitan areas continue to be very attractive to beginning teachers.

It is also possible that relatively higher salaries in small, rural schools will help solve another problem identified by school reformers — retaining experienced teachers. Small, rural schools have never experienced the turnover problem of urban and suburban schools, primarily because teachers had deep roots in the community and because competing job opportunities were not readily available. By and large, faculties in small, rural school are older and more experienced than in urban or suburban schools. Higher salaries will likely have the effect of delaying retirement of current teachers in small rural schools limiting the need for recruitment of new teachers in many areas. At the same time, retaining older teachers may delay the infusion of new energy and skills into the teacher corps in many small, rural communities.

Teacher Compensation: Changing the Way Teachers Are Paid

From the inception of the education reform movement in the 1980s, policymakers began to design changes in the way teachers are paid. During the century or so that the current public elementary and secondary education system evolved, teacher compensation came to be based on

a model similar to the way in which industrial workers or many civil servants were paid. Teachers received pay increases based on seniority and upon the attainment of additional educational credentials, but their pay did not vary according to their performance. This system worked well as long as the public and state policymakers were satisfied with the output of the education enterprise. As doubts about the effectiveness of teachers grew, however, business leaders and others wondered aloud whether or not teachers could be paid according to performance. Much of this debate was fueled by the public perception that a significant cause of the problems in the schools was the existence of "bad teachers" and the lack of an incentive system to recruit and keep "good teachers."

In the 1981-82 debate over education reform in Mississippi, for example, some legislators proposed a system of "merit pay" for teachers. This system would be designed to reward "good teachers" and, by withholding raises, punish "bad teachers." Governor Winter and his advisors seriously considered this proposal but concluded that too many substantive and political obstacles stood in the way of implementing an effective merit pay plan. Although a merit pay plan was not part of the 1982 Mississippi reform, the legislature did mandate an extensive study of the idea by the Department of Education. A year later in Tennessee, Governor Lamar Alexander proposed a "merit pay" plan, although this too failed amid substantial opposition from teachers.

The problem with "merit pay" when applied to the schools was that no one could reliably specify how individual teacher "merit" might be judged objectively nor exactly who would be in charge of making that judgment. Teachers and others expressed grave doubts about the ability of principals or other school administrators to administer a system of evaluation that would result in objective determinations about the effectiveness of individual teachers. Fears of favoritism, nepotism, racial discrimination and other evils strengthened opposition to pure "merit pay" proposals.

Some policymakers continued to look for ways to inject differentiated pay into the compensation system and sponsored measures to develop evaluation systems and train administrators to make objective judgments. This hope that school principals and other administrators could learn to administer teacher evaluation systems was a major part of the motivation of governors and legislators in creating a series of institutions to train principals and administrators. Since 1982, all of the Appalachian states have instituted or revised their administrative staff development programs and nine states have implemented evaluation programs for administrators.

Failing to devise an acceptable way of implementing a merit pay plan for all teachers, state leaders reasoned that if it proved too difficult to judge the effectiveness of every teacher, it might be possible, at least, to determine who the really excellent teachers were. These "master teachers" could be rewarded and other teachers could learn from them. Master teachers would serve as role models and incentives for performance would be built into the system, since regular teachers would presumably compete to be designated as "master teachers." Thus, the concept of career ladder compensation systems was born, developed and tested, first in Tennessee and now in many states across the nation.

In some respects, the career ladder concept mirrored the way teachers are paid in another state system: the higher education system. In that system, four levels of teachers are identified, based not only on seniority but also on peer evaluation: instructor, assistant professor, associate professor and professor. The career ladder concept was attractive to governors and legislators, since it did not require that every teachers' pay be tied to an evaluation every year and since it followed a familiar pattern in higher education. In addition, proponents of career ladders contended that by creating an orderly career progression, the public school system would be promoting professionalism among teachers, giving incentives for continuous upgrading of teacher skills.

Despite the relative acceptability of career ladder programs, compared at least to "merit pay", governors and legislators have had some difficulty in implementing full-fledged changes in teacher compensation. In six states in the ARC region, career ladder programs were enacted, but most are being studied in a variety of demonstration and pilot programs. During interviews in state capitals, state education officials described implementation of changes in teacher evaluation and compensation practices as among the most difficult tasks in implementing recent education reforms. In particular, they cited difficulties in adjusting to new evaluation systems in small, rural schools.

Except in Tennessee and Georgia, no statewide career ladder programs are now in operation in the region, although a variety of districts are experimenting with the program. This legislative session, Tennessee made its career ladder program optional for individual teachers. Kentucky, Ohio and North Carolina are operating pilot career ladder programs and Maryland is experimenting with a teacher incentive program which rewards teachers who demonstrate superior performance and productivity. South Carolina is testing a variety of teacher compensation plans, including career ladders and individual teacher incentive pay.

As a result of limited statewide initiatives, few small, rural schools in the region have had much experience in judging the effects of changes in teacher compensation methods. The success or difficulties experienced in implementing career ladders and other forms of teacher incentives will have an important impact on small, rural schools. If supporters of career ladder plans are correct, these changes will help rural districts recruit more effective and experienced teachers, develop more professional beginning teachers and reward competence. If detractors are correct, career ladder and other systems that attempt to reward individual teachers for performance may disrupt the schools at worst or simply be a waste of money at best.

Related less directly to teacher compensation is the issue of teacher evaluation. Nine of the states in the ARC region have increased requirements related to teacher evaluation. Many of these efforts can, however, be seen as precursors to career ladder implementation or other forms of merit pay programs. Since 1982, for example, all professional employees in North Carolina schools have undergone yearly evaluations. In 1985, the evaluation system for teachers was revised to include skills associated with increased student achievement, part of a pilot program to determine whether or not career ladders will be workable in that state.

In Georgia, teacher evaluation is part of a required comprehensive staff development plan for each school. Teacher performance must be evaluated annually and plans for eliminating deficiencies must be developed. In 1986, Kentucky moved to a competency based teacher evaluation system. In Mississippi, a personnel appraisal system linked to compensation is optional in local districts.

Teacher Recruitment and Retention

Much of the rhetoric supporting the first wave of education reform in the 1980s revolved around improvements in student achievement, but most of the measures contained in the reform packages themselves address teaching and teachers. Good teaching has been equated with improved learning.

Several factors influenced policymakers in addressing the issue of recruitment and retention of teachers. First, teacher organizations and some analysts postulated an impending teacher shortage, despite declining enrollments in most grades and a teacher glut during the 1970s. Many teachers were "burning out" and many others were retiring, went the argument. Because many of the current teacher corps were hired to respond to the early baby boom, many senior and experienced teachers would retire. In addition, if their salaries had peaked because of inadequate career incentives, good teachers might seek other job opportunities even before retirement. In the public debate at least, the issues of teacher retirement and teacher "burnout" were mixed, despite the fact that these issues may be quite separable. Others — particularly school administrators — argued that while the teacher "burnout" issue might be real for the very best teachers, in many cases early retirement of the "bad teachers" would benefit the system.

Second, advocates of measures to address the issue of teacher supply argued that the pool from which new teachers are drawn was becoming sadly deficient. Low wages, lack of professional status and bad working conditions conspired to deter talented and ambitious young people from a teaching career. In the past, limited opportunities for women and minorities in other professions had meant that the teacher recruitment pool captured many talented minority and female recruits, but the opening of opportunities to these groups in the larger society meant, ironically, that the pool of talent attracted to public school teaching was further depleted. Evidence of the decline in talent available for teaching positions was taken from test scores of students in teacher education institutions. These scores had been declining since the mid-1970s. Even though an actual teacher shortage might not develop, these advocates argued, a shortage of high quality teachers was surely in prospect if measures were not taken.

Third, policymakers concerned about teacher supply pointed out that even if adequate talent and numbers of teachers were available for most disciplines, "spot shortages" among teachers of science, mathematics and foreign languages would likely occur, especially because other education reform measures were requiring schools to offer more courses in these areas. Competitive pressures from private industry and government were drawing off qualified teachers in the sciences and mathematics. Special efforts had to be made to ensure that these key teachers were available for the revitalizing of the school systems. Finally, these shortages might be exacerbated in rural areas and inner city schools, where salaries were lower or working conditions were worse than in wealthier areas.

Responding to all these contentions, state officials designed a variety of recruitment incentives to ensure the supply of "good teachers" and incentives for teacher retention. A particularly popular measure adopted in ten Appalachian states is that of providing forgivable loans to attract college students into teacher preparation institutions. The loan for each school year can be forgiven by one year of teaching in the state. Some programs are pegged to teacher preparation and teaching in areas of critical need. All of the Appalachian states provide some form of scholarship or loan to attract teachers, particularly in shortage areas.

In 1983, for example, Virginia established a forgivable loan program for teachers. By 1987, nearly 700 students of math, science and foreign languages were granted forgivable loans for college education annually. Alabama instituted a program of scholarships in 1986, to attract new teachers in areas of critical need. New York instituted a Governor's Teacher Corps program which offers college scholarships and graduate fellowships for those, especially minorities, who choose to teach, and offers as well a series of scholarships and fellowships to interest individuals in preparing for teaching careers in math, science, occupational education and second languages. In Mississippi not only were forgivable loans for new recruits implemented, but the state also offered loans of up to $1,000 per year for three years to teachers certified in other fields to retrain to teach science and mathematics. Georgia added math and science to its forgivable loan program for teachers in areas of critical needs, and Tennessee, Kentucky and Pennsylvania also developed programs for the same critical need areas. Pennsylvania also provides similar loans to attract teachers to teach in disadvantaged urban and rural areas.

Measures to encourage "good teachers" to keep on teaching were embedded in other reforms. Programs to accord higher status to senior or "master teachers" were justified in part as a way of retaining good teachers. Special awards for good teaching were also created to encourage teachers to stay on and increase their efforts. In some states, programs to increase the pay of teachers in shortage areas, such as science and math, were proposed but few of these proposals were implemented.

A major justification of career ladder proposals and even merit pay plans was to give incentives to good teachers to continue teaching. Even across-the-board salary increases were designed in part to help recruit better talent and to retain current teachers. State officials reasoned that if salaries in general were more competitive, fewer good teachers would be tempted to leave for better jobs. Yet neither of these approaches to encouraging retention through added compensation really addressed the other side of the retention issue: the perceived need to avoid retaining the mediocre or "bad teacher." Without extensive, objective evaluation of the effectiveness of individual teachers, the school systems could not really judge which teachers should be encouraged to stay and which teachers should be encouraged to leave. Some argued that large-scale attrition of the current teacher corps would, in fact, be beneficial to a system that required more radical change.

Teacher Certification and Professional Development

The intellectual underpinnings of many of the school reforms enacted during the 1980s equated good teachers and good teaching with improvements in student learning: if the system

could be populated with good teachers, student learning would improve. Several measures were taken to change the ways in which people were certified to become teachers and to encourage existing teachers to improve their knowledge and skills. These measures were designed to prevent unqualified teachers from entering the profession and to require existing teachers to develop professional skills in order to remain in the profession. Policymakers were trying to increase the pool of teachers—responding to the warnings of an impending teacher shortage—while at the same time restricting the entry of some students into the profession of teaching.

At the same time that policymakers were giving all teachers substantial raises, they also stiffened requirements for in-service training and other professional development activities. As a result, a variety of changes in teacher certification procedures, the imposition of teacher competency testing in a few states and broad new requirements for professional development were enacted.

(1) *Teacher Certification.*

All states regulate entry into the public school teaching profession through a process of teacher certification. Traditionally, the process of certification was linked to the higher education system. Students who gained degrees from accredited programs of teacher education received teaching certificates, although in some states passing the National Teacher Examination or a similar test was also required. In theory, the license to teach could be removed by state authorities, but in practice this seldom occurred.

As charges that unqualified or less talented teachers were entering the system gained credence, state policymakers began to look closely at the system of certification. Many legislators believed that while schools of education might teach pedagogy well they were not imparting enough substantive knowledge. Casual observation revealed that majoring in education was considered low-status and very easy among college students. Many of the more talented education majors in fact did not intend to teach; they were only getting their teaching credential as an "insurance policy."

To deal with the issue of teacher certification, policymakers moved in two directions: to tighten certification requirements for teachers moving through the traditional system and to open teaching to qualified persons who had not chosen to seek college degrees in education. Education reformers sought to shore up the traditional route to a teaching certificate by requiring more substantive courses, practice teaching and added testing. At the same time, some states provided alternate routes to teaching certificates for those who possessed degrees in substantive subjects but had not taken courses in teaching methods.

Nine of the states in the region required not only that prospective teachers complete course requirements for a degree in education but also that they pass teacher competency tests of one sort or another. In Tennessee, for example, the state required that prospective teachers pass a Pre-Professional Skills Test or achieve a passing score on the California Achievement Test in a subject area. Pennsylvania will implement a similar program in 1988. Beginning in 1986, Georgia required prospective teachers to pass a test battery which assesses specific content knowledge and skills related to the certificate. North Carolina raised the score on the National

Teacher Examination necessary for certification as did Mississippi and Maryland. Beginning in 1984, New York required prospective teachers to pass an entry examination. Alabama and Ohio also instituted similar requirements. Kentucky required a teacher competency examination as part of its 1985 reforms.

In addition, eight ARC states required a probationary period for new teachers before full certification could be earned. In most cases, this meant that beginning teachers must undergo a probationary period of one or two years in actual teaching before being granted a permanent or renewable teaching certificate. In Tennessee, North Carolina and New York, new teachers are assigned experienced teachers either as "mentors" or support teams to monitor beginning teacher performance and to help new teachers improve their skills. During the probationary period, beginning teachers are evaluated not only by administrators but also by peers. These evaluations help determine whether full certification would be granted.

In 1983, for example, Mississippi pioneered a similar system in which each probationary teacher would be evaluated by a three-person team over a two-year period. In addition, all teachers were required to establish and follow a professional development plan. In Virginia, beginning teachers are required to demonstrate satisfactory performance for two years before receiving a regular certificate. Special evaluation teams monitor performance in an intensive professional support program for beginning teachers. In 1985, North Carolina adopted a system in which local support teams were established to help new teachers during the first two years of employment. At the end of the two-year period, the support team makes a recommendation to the state regarding permanent certification. Kentucky now requires a one-year internship or probationary period for new teachers as does New York.

The second policy emphasis in the area of teacher certification was to open new ways for talented people who want to teach to acquire the license to teach. In the Appalachian region, eight states established alternative routes to certification. In North Carolina, for example, alternative certification requirements were established in 1986. These required a prospective teacher to have a bachelor's degree, pass a certification test and acquire additional training and teach in an area of critical need. West Virginia and Georgia also established an alternative certification method for teachers in critical areas of instruction. In Georgia, content requirements must be met initially, and provisions must be made for meeting professional education requirements through staff development or college courses while on the job. In Alabama, Virginia and West Virginia, similar systems were adopted as well. In West Virginia, prospective teachers must have a Bachelors Degree, pass a certification test, complete an internship, demonstrate competency in their field and teaching.

In Mississippi, the state required in the 1986-87 school year that persons requesting alternative certification to obtain a Bachelor's Degree, score at least the 51st percentile on the National Teachers Examination, complete an internship and seek further teaching education. Two different programs have been adopted in Maryland. In the first instance, prospective teachers must have a BA, pass the appropriate speciality area of the NTE and have 5 weeks of teacher training. The alternative programs involves a one year intensive study program at the University of Maryland.

(2) *Professional Development*.

To address the issue of upgrading skills of current teachers, many states adopted provisions requiring additional training for recertification or higher pay. Under the traditional compensation system, teachers could receive higher pay not only for seniority, but also by obtaining masters degrees or attending other courses. These activities were optional. Under many of the education reform plans enacted in the 1980s, in-service training and other professional development activities were made mandatory or were expanded dramatically. In addition, schools were required to offer a variety of staff development programs to allow teachers to improve their skills and update their knowledge.

All the states in the region, except for New York and Tennessee, implemented new requirements for school districts to offer programs of professional development to teachers. Virginia is typical, requiring each school division to provide programs designed to meet the developmental needs of teachers and other instructional personnel. In South Carolina, competitive grants are awarded to teachers to improve teaching practices and in-service programs have been developed on effective schools and classrooms. In addition, Centers of Teaching Excellence are being developed at selected colleges. In Maryland, the state helps local districts provide in-service training aimed at improving instruction through courses in mastery learning, student team teaching, active teaching and increasing academic learning time.

In Alabama, staff development provided through regional centers is limited to teachers in areas of critical need. Georgia's Quality Basic Education Act requires all local school districts to provide all public school officials and personnel the opportunity for continued staff development. State stipends are given to certified personnel attending staff development activities. State stipends are also given for participation in staff development activities in North Carolina. Persons participating in Kentucky's staff development programs are entitled to salary increments beyond the regular salary schedule. Pennsylvania and West Virginia require each local district to develop professional development plans.

Increasing Classroom Time and Improving Instructional Practices

Among the criticisms of the schools articulated during debate over education reform was that instructional practices in the classroom were lax. Classroom time was not used productively and instruction was unfocused. Not all of the blame was laid on the teacher. Critics recognized, for example, that too much classroom time was being taken for non-instructional activities demanded by school authorities. Over the years, the length of the school day and the length of the school year had in some instances eroded, and the amount of instructional time had diminished. At the same time, critics pointed out that teachers needed to be more effective in the use of the time they did have with students in the classroom. As a result, many of the education reform programs passed during the 1980s included measures that increased instructional time and required teachers to plan the use of their time more effectively.

Measures to increase instructional time involved lengthening the school day, lengthening the school year and limiting classroom interruptions. In addition, several states took action to

limit student and teacher absences. The Kentucky legislature rescinded several mandated programs and discontinued the practice of snow-banking days to make more time available for basics. In South Carolina, for example, students are not permitted to be absent for more than ten days per year without permission from the school board. The teachers' year has also been extended to provide five additional days for lesson planning. Unnecessary classroom interruptions have been banned. Maryland increased the number of required hours of instruction to seven periods per day. Ohio also increased the time required for basics. Tennessee extended the school year by five days for classroom instruction. Virginia's new accreditation standards require that all students attend school a full day, which must be allocated to instruction without intrusions by extracurricular activities.

In 1982, Mississippi adopted for the first time a compulsory school attendance law which will be phased in through 1990 when school attendance will be required for all children through age sixteen. Fines are imposed on parents who do not comply with the law. Georgia is implementing a statewide computer network to help reduce teacher paperwork so that more time can be spent on actual teaching. North Carolina's Basic Education Plan also mandates a minimum of five and one-half hours of instruction daily for grades K-eight.

Across the board reductions in class size were implemented in only two states in the region — Virginia and Kentucky. By reducing class sizes, state officials hoped to improve the learning environment, especially in the elementary grades. Teachers supported class size reductions enthusiastically. In Kentucky, class sizes were capped at 29 students for grades one-three and 31 students for grades 4-12. Virginia required that school districts maintain a ratio of at least 54 certified instructional employees for every 1,000 students. Recently, the Virginia statewide ratio has been increased further to 67.2/1,000.

Four other states, Mississippi, North Carolina, Ohio and Tennessee implemented smaller class sizes for the lower grades only. A special program was implemented in Mississippi for grades one through three where teacher assistants were provided to the classrooms to help improve students ability to read. The teacher/student ratio in Ohio cannot exceed 1:25 on a district wide basis for grades one - four. Tennessee also provides teacher aides for grades one through three. Local districts have the option of employing at state expense one teacher aide for every seventy-five students or applying the funds to employing additional full-time teachers in grades one through three rather than aides. In North Carolina, funds have been allocated to lower class size in grades K-three to 23 students per teacher.

In most states in the region, state education officials also have encouraged principals and teachers to improve lesson planning and study effective teaching methods. Evaluation systems implemented in conjunction with education reform programs have stressed lesson planning and maximizing instructional time in the classroom.

Improving Administration and School Leadership

Education policymakers during the 1980s recognized that improving the management and leadership within schools is extremely important to improving educational performance. As

a result, all of the states in the region took action to improve administration and school leadership, focusing primarily upon school principals. A variety of institutes and training programs were created to help administrators learn the latest techniques of school management. An important focus of these programs is personnel evaluation, but many other subjects are taught as well.

Nine states have established assessment centers to assist school divisions in identifying and developing highly skilled public school principals and other school leaders. Five states have developed principals academies to train and upgrade the skills of public school principals and other administrative staff. Mississippi, for example, created a School Executive Management Institute that serves all of the state's principals and other school administrators. In South Carolina, principals are required to take part in seminars and other training activities at least once every two years. A school leadership academy was established in 1984. In West Virginia, the state established an academy for training principals in 1985. In Alabama, regional in-service centers were created and the superintendency, the principalship and other administrative and supervisory positions were designated as areas of critical need to be served by these centers.

North Carolina is piloting a career development for administrators linked to a compensation plan. Tennessee's career ladder program covers administrative staff and is linked to compensation. South Carolina also operates a principal incentive program.

In addition to programs for school administrators, five states in the region created or upgraded technical assistance capacities in order to assist school administrators. State officials are particularly concerned that school administrators understand the implementation of statewide reforms. Accordingly, a program of technical assistance to school districts was begun in South Carolina in 1984. The Management Assistance Division of the Pennsylvania Department of Education helps school districts solve problems through financial consulting services, and by conducting studies for local districts on staffing, transportation and facilities. Kentucky provides assistance to improve leadership, instructional planning and time management to schools which rank among the lowest in average student achievement. In Georgia, the state staff provide technical assistance through the school climate management program to help improve school performance through better management techniques and more active participation in school operations by parents, teachers, students and the general public.

State policymakers are also sensitive to criticism that education reform measures have brought with them vast amounts of paperwork for both teachers and administrators alike. State officials have moved to try to limit the paperwork involved with new requirements, although many local officials believe that the states have not been sensitive enough to eliminating unnecessary and duplicative paperwork.

School efficiency is also the rationale behind a number of actions taken by states to encourage small school districts to consolidate or to share resources. School consolidation is a politically controversial issue, and most states did not enact measures to force small school districts to consolidate. Some did, however, provide substantial positive and negative incentives to school systems for consolidation. In Georgia, for example, local school systems that consolidate will not be required to finance any portion of state-approved construction or

renovation costs necessitated by consolidation. A state bond issue in Alabama provided a financial incentive for local boards of education to consolidate small high schools. In New York, the legislature provided substantial financial incentives for consolidation. As a result, more than 20 districts have consolidated in the past 3 years. In Mississippi and several other states, some small districts have consolidated voluntarily because their leadership decided that individually they could not meet new state mandates.

Programs for Special Populations

In the midst of sweeping changes for schools throughout the region, several of the most important changes for rural schools have been state mandates for expanded programs for special populations of students. These groups of students include the physically and mentally handicapped, gifted students and those with special remedial needs. In several states, identifying students at risk of dropping out of school and providing special help became a priority as well. Finally, states took some actions to address the issue of pre-school preparation of children not only through traditional social service approaches but through extending the responsibilities of the local schools to pre-school children.

Programs for the Handicapped

Under federal law, physically and mentally handicapped students must be "mainstreamed" into schools and must be educated, where possible, in regular classrooms. Since the mid-1970s, the federal government has provided some funds to help schools accomplish these tasks. In some of the states in the ARC region, education reform provided the opportunity for advocacy groups to raise the issue of special education in state legislatures and to secure funding for more special education teachers, additional programs for the handicapped and for retrofitting school buildings to accommodate the handicapped. In eight of the states in the ARC region, special education became a high priority.

In Kentucky in 1985, for example, the state committed to a multi-year program of providing more funds for special education teachers. The New York Board of Regents expanded the number of handicapped students who were eligible to receive certificates for completion of appropriate individualized education programs. Pennsylvania provides a technology grant program for teachers for equipment which will open new learning opportunities for their disabled students. In Maryland, the Christina Foundation in conjunction with Apple Computer developed a special program for handicapped children. West Virginia and Virginia made the expansion of regional and local services to the handicapped an integral part of education reform. In Virginia, three centers serving eleven local school districts were established to assess the vocational education needs of handicapped students.

Programs for Gifted and Talented Students

In the context of educational reform debates in the states, parents and interest groups expressed their concern that the general erosion of school standards had taken an especially hard toll on enrichment programs for gifted students. Furthermore, policymakers felt that their state's

economic competitiveness was related to how well they addressed the needs of gifted students. As a result, eight states inserted into their overall education reform packages a variety of programs for the most talented students, making them standard features of education reform packages during the 1980s.

These programs took a variety of forms. In some states, special schools were created to provide enriched course offerings to gifted and talented students. A number of summer programs were established in states. In Maryland, for example, the state supports one and two week summer institutes for gifted students in grades five-twelve at college and university campuses, science museums and other institutions. Each summer, Pennsylvania runs five five-week Governor's Schools for talented high school students in cooperation with five major universities. In addition, ten regional schools of excellence provide other students with two-week enrichment experiences in such areas as the arts, science, classic logic, languages and environmental studies. West Virginia instituted in 1984 the first Governor's Honor Academy, a four week summer academy for gifted students in the humanities, fine arts, mathematics and science.

South Carolina required that all gifted and talented students must be provided programs during the regular school year or during summer school to develop their unique talents. In Tennessee, an extended day and year program for gifted students was begun in 1985. Kentucky more than doubled its state funds for the gifted, expanding them to every school district in 1982. The state added a Governor's Scholars Program in 1983 for students to study science, technology and Kentucky's future, and additional classroom units were added for exceptional students. Mississippi created a residential math and science school for gifted juniors and seniors. Ohio instituted new requirements that local districts must identify all gifted children. In Virginia, all school divisions are required in grades K-12 to conduct programs for the early identification of gifted and talented students and to offer differentiated instructional opportunities for them. Virginia operates many Governor's School programs for the gifted and has recently identified the technical arts as an area of gifted study.

Dropout Prevention Programs

All of the states in the ARC region have alarmingly high dropout rates. As Table 4 illustrates, dropout rates range from 19.6 percent in Ohio to 37.3 percent in Georgia. Eight of the 13 ARC states had dropout rates above the national average. During the first wave of education reform in the 1980s, state policymakers did not address the dropout problem in a comprehensive or systematic fashion. They did enact and fund a number of pilot programs or provided some additional resources to school districts to address the problem of dropout prevention. The Appalachian Regional Commission itself has recognized this issue and has put substantial resources into dropout prevention programs over the past few years.

TABLE 4
DROPOUT RATES, 1986 - 1987

State	Percent
GEORGIA	37.3
MISSISSIPPI	36.7
NEW YORK	35.8
SOUTH CAROLINA	35.5
ALABAMA	32.7
TENNESSEE	32.6
KENTUCKY	31.4
NORTH CAROLINA	30.0
VIRGINIA	26.1
WEST VIRGINIA	24.8
MARYLAND	23.4
PENNSYLVANIA	21.5
OHIO	19.6
NAT'L AVG.	28.5

SOURCE: U.S. Department of Education, *State Education Statistics Supplement*, 1988.

Eleven states instituted program initiatives aimed as students at-risk for dropping out of school. Most were pilot programs operating in a limited number of local school districts. Maryland and New York have linked staying in school to jobs by providing guaranteed work or advanced education in exchange for meeting attendance and performance standards. Tennessee has extended the school day and year for at-risk students. Alabama provides training for teachers in dealing with at-risk students. The most far reaching approach was taken in Virginia which requires that alternative education programs be provided by each school division for students whose needs are not met in the traditional classroom.

State policymakers also recognized a strong relationship between dropping out of school and other risk-taking behavior. Four states have instituted new drug abuse prevention programs in the schools; two have begun suicide prevention programs; and, two have initiated pregnancy prevention programs sponsored by the departments of education.

Since the dropout problem is concentrated among poor and minority students many of whom live in the Appalachian region, dealing with the dropout rate is a major challenge for schools in Appalachia. By 1990, the size of this group of poor and minority students is expected to increase nationally to well over 40 percent of the student body and may reach nearly 50% by the end of the century. The poverty rate among children has been steadily increasing in recent years. If the correlation between poverty, minority status and dropout rates continues, then dropout rates may go up rather than down.

Many states have made attempts to identify students who require remediation and to provide special help to those students early in their school careers. This type of intervention is presumed to help reduce the dropout rate in the long run. Other advocates of education reform argue that early childhood programs, concentration of instructional effort in the elementary grades and other improvements in instruction will all reduce the dropout rate in the long run. These initiatives have been implemented to varying degrees in the states as discussed in earlier sections.

Some policymakers are now concluding that high dropout rates speak directly of the failure of the educational system to meet the educational needs of that percent of its students. They suggest that states must now examine changes that must be made in the process of teaching and learning itself to reach the growing percent of students who are disaffected.

Programs for Early Childhood Education

Pre-school preparation of children was identified as a major unmet need as education reform measures moved through legislatures during the 1980s. In some cases, policy attention was focused on very basic changes. In Mississippi, for example, the major provision of the 1982 Education Reform Act was to require that all school districts offer kindergarten programs. In other states, policymakers struggled with the issue of whether or not to involve schools in pre-school preparation programs other than kindergartens.

Early childhood education, as distinguished from custodial child care, has become more important as the demands on parents have increased, making it more difficult to prepare children adequately for their school years. Teachers complain, justifiably, that they are being asked by policymakers to improve student performance at the same time that the preparation of children for school seems to be lagging. This lag is at least in part attributed to the growing number of single parent families and two parent working families where less time is available at home for early childhood education.

By focusing resources such as teachers aides, lower class sizes and remedial instruction in grades one-three, many of the education reforms enacted during the decade implicitly recognized this problem, but few of the reforms addressed early childhood education as an integral part of reform. Most reform efforts in this area were focused on "at risk" children who mostly come from low-income, broken families and have not had the kind of pre-school stimulation and preparation that is afforded by wealthier, intact families.

In 1983 in Pennsylvania, for example, the legislature appropriated some funds for pre-school programs for at-risk children. Increased emphasis has been placed on developmental curriculum and teacher training which will make it possible for disabled children to move more easily into regular school programs when they are of school age. In Tennessee, pre-kindergarten summer programs were established using career ladder teachers, and kindergarten was extended to all preschoolers. In Kentucky, a pre-school program was implemented for at-risk children, and kindergarten was mandated as a prerequisite to entering first grade.

Alabama initiated a statewide kindergarten program in 1984 as did Georgia in 1985. In New York, state aid is available for local districts to conduct pre-kindergarten classes for all four-year-olds who wish to attend. Ohio is operating a pilot pre-kindergarten program and all school districts are required to offer kindergarten programs for students who want to attend. A pre-kindergarten program is offered statewide in South Carolina. Districts are permitted to contract for the provision of these services. Four-year-olds may attend optional child development programs for those with predicted readiness problems. West Virginia's preschool programs are focused entirely on the handicapped.

Major action on early childhood development proposals remains to be taken. At the heart of the issue is whether or not the schools should be asked to shoulder the burden of pre-school preparation or whether other institutions, primarily social services programs, should be involved. Large scale, state-funded day care programs now provide some developmental child care, as does the federally financed Headstart program. Some educators are enthusiastic about extending the responsibility of the schools into pre-school years but others argue that with all the other changes happening in the schools, school systems do not have the capacity to take on this important task. The issue remains unresolved in most states in the region.

School Finance Issues

With education reform came large infusions of state aid in most of the states in the ARC region. State aid to education was increased to help pay for many of the reforms. In southern states where teacher salary increases are traditionally financed by state aid increases, state aid followed the salary hikes mandated by legislatures. State aid was also increased to pay for teachers aides, new courses and a variety of other programs. Programs for special populations were almost entirely financed by the states. Table 5 illustrates the percentage growth in state aid to education from 1982 - 1987. During this period, state aid has increased by 50 percent or more in three states, and by 30 to 50 percent in eight others.

TABLE 5
PERCENTAGE INCREASE IN PER PUPIL STATE AID FOR ELEMENTARY & SECONDARY EDUCATION, 1982-83 - 1986-87

State	Percent
ALABAMA	74
NEW YORK	58
OHIO	50
SOUTH CAROLINA	46
NORTH CAROLINA	41
PENNSYLVANIA	40
WEST VIRGINIA	35
GEORGIA	34
KENTUCKY	34
MARYLAND	34
TENNESSEE	33
MISSISSIPPI	23
VIRGINIA	17

SOURCE: Calculated from State Policy Research, Inc., *State Policy Data Book '85* and *State Policy Data Book '88*.

State mandates, combined with increased willingness of local taxpayers to fund schools, caused local resources to increase as well during the 1980s. On a percentage basis, locally provided resources increased nearly as fast as state aid throughout the ARC region. Table 6 depicts estimated increases in local school resources from 1982-1986. Over this period, local spending increases ranged from a low of three percent in Alabama to a high of 73 percent in Virginia.

TABLE 6
ESTIMATED INCREASE IN LOCAL RESOURCES PER PUPIL FOR ELEMENTARY & SECONDARY EDUCATION, 1982 - 1986

State	Percent
VIRGINIA	73
GEORGIA	56
NORTH CAROLINA	55
KENTUCKY	43
PENNSYLVANIA	43
MISSISSIPPI	41
MARYLAND	39
SOUTH CAROLINA	35
NEW YORK	35
TENNESSEE	32
WEST VIRGINIA	30
OHIO	25
ALABAMA	3

SOURCE: Calculated from State Policy Research, Inc., *State Policy Data Book '85* and *State Policy Data Book '88.*

On a per pupil basis, increases in state aid and more local effort translated into increases in local education spending. Table 7 shows per-pupil spending in 1987 and the percentage increase in per-pupil spending between 1983-84 and 1986-87. In all but three of the Appalachian states, per pupil spending fell below the national average. In four of the states, increases of 30 percent or more were realized over this period.

TABLE 7
PER PUPIL SPENDING FOR ELEMENTARY & SECONDARY EDUCATION (1986-87) AND PERCENT INCREASE (1983-84 - 1986-87)

State	Amount ($)	Percent Increase
NEW YORK	6,224	28.5
PENNSYLVANIA	4,691	25.9
MARYLAND	4,660	25.3
VIRGINIA	3,809	28.4
OHIO	3,764	21.8
WEST VIRGINIA	3,619	39.9
NORTH CAROLINA	3,473	41.2
GEORGIA	3,167	37.2
KENTUCKY	3,107	21.8
SOUTH CAROLINA	3,096	27.4
TENNESSEE	2,842	30.8
ALABAMA	2,610	24.2
MISSISSIPPI	2,534	29.2
NAT'L AVG.	3,983	NA

SOURCE: Calculated from State Policy Research, Inc., *State Policy Data Book '85* and *State Policy Data Book '88.*

To the extent that state aid increases did not cover the cost of implementing statewide education reforms, considerable fiscal pressure was created on local taxing authorities to find the resources to implement reforms. In some rural areas, where tax bases have not been growing rapidly, these fiscal pressures have become severe. Whether or not state aid increases were targeted to poorer districts would have an important effect on the ability of rural schools to cope with the financial burdens of statewide education reforms. In states such as Ohio or Georgia that fund schools through a state aid formula that recognizes differences in the wealth of school districts, simply increasing state aid has helped to reduce the pressure on small, rural districts with low property tax bases. In states such as Kentucky and Mississippi, which do not use "power equalized" education funding formulas to distribute most of their state aid, considerable financial pressure was undoubtedly felt in small communities as a result of education reforms.

In two states, legislation was enacted to permit broader taxing power of localities in order to finance the reforms. Legislation was enacted in Kentucky in 1984 which required local districts to levy a maximum ad valorem tax of 15 cents, or the rate supported by the district power equalization ratio, whichever is greater, in order to qualify for power equalization funding. Legislation was also adopted to give local districts more tax raising options by permitting districts to levy a gross receipts tax, an excise tax on income and/or an occupational license tax. North Carolina permitted localities at their option to add an additional one cent on to the sales tax to support facilities or program enhancements.

Three states increased state taxes to financed their reform initiatives. Mississippi increased the state income tax and sales tax as well as excise taxes. In South Carolina and Tennessee, the reform packages were financed by a one cent increase in the state sales tax. In Kentucky and West Virginia, which did not increase taxes significantly to finance reforms, stagnant economic growth has limited the ability of the states to follow through on reform promises. Kentucky has been forced to delay reduced class sizes and other reforms, while West Virginia has been constrained in its attempt to resolve state-local funding issues.

In several states, funding innovations such as corporate donations and educational partnerships constituted significant elements of their reform packages. In Alabama, public schools and classes have been adopted by business, industry and other organizations participating in the Adopt-A-School program. The Abell Foundation in Maryland has provided $100,000 to students who participate in community service projects. Pennsylvania is supporting a variety of educational partnerships including a statewide effort to increase the number of high school graduates who go on to college.

The issues surrounding school finance are complex and involve much more than this study can address productively. The fiscal impact of reforms on small, rural districts will, however, be addressed at least from the perspectives of school officials and other local officials interviewed in the next section of this study. Indeed, their perceptions of fiscal problems resulting from statewide education reform may be important for setting the agenda for future reform proposals.

Chapter 4
IMPLICATIONS OF STATEWIDE EDUCATION REFORM FOR RURAL SCHOOLS : PERCEPTIONS OF STATE AND LOCAL OFFICIALS

Information on which to base a rigorous evaluation of the effects of statewide education reform is not yet available. In most states, many of the reforms are only a few years old. Many facets of the education reform proposals enacted during the 1980s are not yet fully implemented. In any large system such as the public schools, reforms will take time to work or to be discredited. To be sure, in most of the ARC states, test scores are up, leading many observers to believe that the reforms as a whole are having measurable impacts on student performance. On the other hand, dropout rates have not declined significantly since the advent of school reforms. In summary, it is probably just too early to tell whether, taken together, the large number of initiatives in the schools is having a positive effect. Systematic, objective data are not available to make that kind of judgment.

It is possible, however, to determine from the policymakers and participants in the public schools whether or not the reforms appear to be having a positive or negative effect. *SRA* took this approach in attempting to find out how statewide education reforms have affected small, rural schools in Appalachia. By interviewing knowledgeable officials at the state and local levels, *SRA* was able to develop informed judgments about the perceptions of people operating the public schools: what was working, what was difficult to implement and future problems looming on the horizon.

SRA interviewed up to six officials in every state capital in the region. Typically, these officials represented state education departments, state legislatures, state legislative staffs and governors' offices. *SRA* staff also visited ten small, rural school districts, interviewing superintendents, principals, teachers, officials of local taxing authorities and local school board members. From these interviews, a picture of the issues challenging small, rural schools emerged. The challenges of implementing statewide school reforms were clarified as were continuing problems confronting the people who educate children in rural Appalachia.

SRA has distilled the results of both state and local interviews into a generalized picture of the perceptions of those officials. The focus is the small, rural school — its administration, what happens in its classrooms, the performance of its students, its financing and the support of parents and the community for the school itself.

Administering the Small, Rural School: Stretching Farther to Meet State Mandates

Both state and local officials recognized that many of the features of statewide education reform had the effect of stretching the administrative capabilities of small, rural school districts nearly to the limit. By and large, state officials believed that adjustments to the reforms were difficult in the first one or two years, but that rural administrators were able to make changes necessary to implement school reforms without major breakdowns in administrative functioning.

State officials recognized that while local cost increases were not mandated in most instances, they were in fact often required in order to fully implement state mandated reforms.

As expected, local administrators were less sanguine about the ease of change, but also claimed to be coping successfully. Their concerns about the pace of change and the effect of administrative requirements on their ability to manage the schools was real, and their concern about limited financial resources was pervasive in all the states.

In their responses to the questionnaire that SRA mailed to 114 school districts, 60 percent or more of the respondents indicated that they have had to participate in and implement changes in evaluation programs for school administrators, administrative staff development programs, training for school board members, and school or district evaluations. Further, they have had to oversee significant changes in curriculum, extracurricular policies, remedial programs, evaluation programs for teachers, staff development activities and changes related to the amount of instructional time provided. They have had to expand programming for the gifted, provide program enhancements in computers and oversee facilities expansion and improvements.

Sixty-eight percent of the respondents indicated that they have had increased difficulty in complying with state policies and procedures as a result of state mandated education reforms. They indicated that their administrative workload has increased and that they have experienced minor changes in the nature of their administrative responsibilities.

Both state and local officials identified the following concerns about the effect of statewide school reform on administrative behavior in small, rural schools:

• *The pace of change mandated by the state has stretched rural school administrators as much as the individual requirements.*

Both state and local officials acknowledged that the pace of change resulting from statewide education reform has stretched the administrative capabilities of small, rural school districts. Both groups also believed that they have successfully weathered the large numbers of changes. State officials were most concerned about overburdening small districts with paperwork based on the accountability measures in the reforms. While local officials complained about paperwork, their most significant concerns revolved around curriculum improvements, finding teachers and instructional resources and meeting budgets. As one local official from South Carolina stated: "We think that the education reform movement has been very beneficial to us, but please tell them to give us a few years to digest all these changes."

• *Paperwork increased significantly in the first few years, but has levelled off. State efforts to reduce paperwork as well as state and local efforts to computerize record keeping are having a helpful effect in controlling the paperwork burden.*

The paperwork burden was a constant theme in discussions with both state and local officials. New paperwork resulted from reforms requiring teachers to plan lessons more carefully, from testing, from reporting requirements tied to programs for special populations and from state requirements tightening financial reporting and personnel evaluation. Principals seemed especially hard-hit, according to both state officials and principals interviewed in rural

schools. While generally decrying the increase in paperwork, none of the state or local officials interviewed claimed that paperwork had forced them to neglect school management, instructional or other duties related directly to student performance. In fact, several teachers in small, rural schools praised requirements for lesson planning and linking their teaching to specific education outcomes, despite the fact that these required extra paperwork. They were seeing improvements in their own instructional activities, they said, and could cope with the added paperwork in return.

Several states have taken action to reduce paperwork, especially for teachers and principals. In Georgia, for example, the state education department is implementing a multi-million dollar computer network designed to automate most paperwork at the school level. Georgia officials are hopeful that this system will help rural school officials in particular as they attempt to cope with paperwork generated from the implementation of the Quality Basic Education Act. In Ohio a statewide computer system has been installed to improve the accounting system and the Pennsylvania statewide electronic communications network - PENN*LINK - is expected to simplify the communications process between and among school districts, intermediate units and vocational schools.

• *Central administrative personnel in small, rural school districts are especially burdened with administrative problems resulting from school reforms because they play many roles that are delegated in larger school districts.*

Administrators in small, rural schools play many roles. As a result, the cumulative administrative effect of reform requirements in a variety of areas may fall on one or two individuals in a very small district while the same requirements may be spread among the workloads of many administrators in the larger districts. The school superintendent in Iva, South Carolina or Webster County, West Virginia, must act not only as the district manager, but also as the budget officer, the personnel officer, the transportation officer and play a number of other community roles as well. While central office staff in small, rural schools often include an assistant principal for instruction, for example, many of these districts do not employ staff for handling other administrative duties.

When statewide school reforms increased reporting requirements, mandated personnel evaluation systems and changed the standards and curriculum at the same time, rural superintendents had some difficulty in responding. Most of the local officials interviewed made this point. At the same time, all of the superintendents claimed that they had successfully implemented state mandated requirements. In general, superintendents worried more about the effect of administrative requirements on school principals and teachers than upon the central offices.

• *Because of the lack of administrative resources in small, rural school districts, implementation of some of the education reform measures have either lagged or optional programs were not being tried.*

Most state officials reported that rural school administrators were having the most difficulty in implementing statewide school reforms. They cited, in particular, implementation of evaluation systems for school personnel. Administrators in small, rural districts had little experience with formal evaluation systems required to implement reforms aimed at improving

teacher performance, they said. When attempting to build the personnel evaluation infrastructure required to implement a career ladder program, for example, administrators in small, rural school districts would need a great deal of assistance and training. As a result, state leaders reported, many of the career ladder and other pilot programs were not being tried in the small, rural schools.

Local administrators interviewed agreed that among the most difficult adjustments were actions to upgrade and formalize their school personnel systems. In some cases, teacher evaluations and evaluations of other school personnel had been relatively informal, as is often the case in a small community. Some administrators in small, rural schools voiced doubt about whether programs such as career ladders or merit pay could work well in the environment of small school districts.

• *Principals in small, rural schools feel more responsibility for managing instruction effectively than before the reform movement. Testing appears to play a role in focusing their attention on student performance. Principals are also concerned about paperwork and reporting requirements taking them away from instructional management.*

As the authors of statewide school reform perhaps expected, the place where most of the statewide school reforms appear to have the most impact is in the principal's office. State officials agreed that most of the administrative changes resulting from education reform actions would affect principals - the instructional managers of the schools. They pointed out that education reforms had included special programs of training for principals and in some cases, such as South Carolina, education reforms included pay increases and incentives for principals. The ability of principals in small, rural schools to implement reforms effectively was a major concern of state officials.

Responsibilities of principals interviewed for this study ranged from an elementary school educating 96 students to a high school whose school population was about 1,000 students. In general, principals in small, rural schools reported the following conclusions about school management in the context of statewide education reform.

• *Principals have more information about student performance than ever before.*

They are paying a price for this information, however, since as one principal said, "It seems like all we do is give standardized tests. So much of our time is spent preparing for tests and administering them." On the whole, however, principals appeared to feel that the feedback available to them on student performance was extremely valuable in managing their schools.

• *Principals see their jobs primarily as instructional managers and are taking this role more seriously.*

Many principals in rural schools have attended programs provided by state institutes for executive management or other training institutions aimed at improving the skills of principals, according to state officials. These programs focus on both school management generally and upon instructional management. In interviews, several principals reported more intensive interaction with teachers, both in discussing curriculum and instruction and in personnel evaluation activities.

• *Administrative headaches and paperwork have grown substantially, especially in preparing personnel evaluations and in reporting on programs for special populations.*

Principals evinced some frustration at being pulled from instructional management activities to fill out reports. As one principal in a medium-sized middle school reported, "Just look at this file box behind me. I spent most of two weeks just preparing for a state auditor's review of our special education program. That was time I could be working with teachers and students." One local superintendent opined that "...meeting state mandates is much more complicated and expensive than ever before. A lot of staff time is being expended on items unrelated to teaching and running the schools."

A common theme in discussions of administrative changes in rural schools caused by education reform was an intangible one — the role of leadership at the school district level and in the schools in implementing the reforms. As one state official remarked: "We are asking school administrators to become school leaders. By leadership we mean instructional leadership in the individual schools and organizational leadership at the district level. While we are putting much more pressure on administrators to lead their 'troops' toward reform, we are also trying to provide them with more resources. Only time will tell whether we are all up to the challenge." Another state official remarked that many rural school boards in his state "seem to be recruiting younger, more innovative administrators than before" as a result of education reforms. "It is possible," he said, "that just the fact of reform has caused school boards and others in these small communities to accept change more readily."

Changes in the Classroom: Curriculum, Instruction and Special Programs

Raising standards in the classroom was a major emphasis of statewide education reform measures enacted during the 1980s. To improve student performance, states mandated additional courses for graduation, created curriculum "tracks" for different groups of students, mandated additional courses in science, mathematics, foreign languages, social studies and computers. Some states also restricted class sizes and provided resources to reduce student-teacher ratios. States took actions designed to recruit, train and retain good teachers and provided incentives for schools to improve learning resources available to teacher and students. All these actions had profound impacts on small, rural schools.

Curriculum

One of the most important changes in education policy was the broadening and intensification of curriculum. More courses were required for graduation in most states. In many states, different tracks — college preparatory, general and vocational — were delineated and more courses were prescribed for each track. Students were also expected to choose tracks earlier than ever before, putting additional pressures on middle school students. A number of states sought to standardize their curriculum as well as to increase the number of elective courses available to students. In addition, mandating special programs for the handicapped and gifted, for example, implicitly meant that schools would have to add classes and courses. Over 80 percent of those responding to the SRA questionnaire indicated that they had implemented

curriculum changes, while over 90 percent implemented increased high school graduation requirements.

For small, rural schools the broadening and improvement of the curriculum was a major challenge. State officials interviewed cited the difficulties of rural districts in providing the facilities, teachers and other learning resources to expand course offerings as among the most difficult challenges facing small districts. By and large, they believed, these districts had conformed with new mandates, although the scarcity of fiscal and human resources in small, rural districts were cited as obstacles.

State officials noted that for small schools and small school districts not only was it difficult to generate new courses but that many of the new classes would be populated by small numbers of students. A class for gifted fifth graders, for example, might be attended by 25 students in a large district but would only generate a few students in a smaller district. Remedial classes are designed to be smaller than regular classes, and the need for remediation in rural districts is substantial, they said. As a result, the statewide reforms essentially required small districts to create many more classes per student population than would seem necessary if one simply assumed that the new mandates would be spread among large numbers of students, filling classes to the optimum level.

At the local level, officials also cited the changes in curriculum and mandates for new and expanded course offerings as one of the most difficult problems with implementation of the statewide reforms. In particular, local administrators were concerned with facilities and teachers for new courses. Establishing new courses, while at the same time reducing class sizes and providing teachers and space for special programs for the gifted and handicapped and for remediation, said administrators, was a major challenge. This impact of reform was primarily felt at the middle school, junior high school and high school level. As one local superintendent put it, "We've had to really hustle to put the new courses and new classes in place. In some cases, we've had to use mobile classrooms. We've been able to find the teachers, although I'm concerned about the quality of some of the higher level offerings." In some instances class size reduction mandates posed serious problems for small schools.

The need for new facilities was raised repeatedly in discussions with local officials, including school board members and members on local taxing authorities. Throughout Mississippi, for example, the 1982 mandate for kindergarten programs created a large demand for new classroom space. While many local districts have looked to state governments for funds to provide new facilities, many other small, rural school districts have had to seek bond issues in order to provide more classroom space. Local effort to build new facilities have also been catalyzed by the statewide school reforms. In Georgia, for example, the state provides substantial financial incentives for any school district to create middle schools. In order to take advantage of these incentives, one district was able to consolidate two small high schools while building a new middle school.

At the same time, several local rural districts revealed that the need for new facilities and the need to share teachers and students prompted by statewide mandates have influenced their

decisions to consolidate schools or school districts. One southern local official noted, "Although our local boards have resisted consolidation, the new state mandates pushed them over the top. People in the schools have been for consolidation for a long time. Now the leaders in the two communities see the need for putting our resources together." In New York, a combination of the pressure of meeting state mandates and state financial incentives for small districts to consolidate resulted in substantial consolidation of school districts. Although consolidation has not been a widespread response throughout the region, at least some small, rural districts have consolidated and several schools within districts have been consolidated as well.

State and local officials pointed to a variety of strategies for rural school districts to meet the statewide demands for broader course offerings. One strategy has been the sharing of teachers and facilities to offer courses that could not be offered by a single district. If a small, rural district could not generate enough student interest or a teacher for a calculus class, for example, it would join with a neighboring district to provide the course for students in both districts. Although these sharing arrangements caused transportation and other problems, they appear to be widespread. As a local superintendent noted, "In the long run, we want to have our own classes, but for now we are sharing. We are sharing teachers and other resources with other districts in our county as we never have before."

A second strategy touted by state officials has been the use of satellite and other remote teaching technologies. Courses in science, mathematics, writing and foreign languages are being provided via satellite and through computer hook-ups to small schools in many states in the region. In Alabama, Maryland, Mississippi, North Carolina, Pennsylvania, and Virginia, special remote learning programs have been put in place. Other states such as New York and Ohio have remote learning programs which predated the most recent wave of education reforms.

In some cases, state officials would like to see consolidation of small, rural school districts but, in the face of strong community resistance to consolidation, they are using technology to enrich the curriculum of small, rural schools. One southern state superintendent of education noted: "In our state, over 100 high schools offer no foreign languages at all. To address that issue, we can either encourage consolidations or try to provide instruction in foreign languages using telecommunications technologies. While we would like to see more consolidation, we are practical enough to realize that we have to work with the smaller schools to provide foreign languages. We can urge them to share instructors or use the new technology."

The necessity for small, rural schools to offer more courses has led some districts to utilize teachers who are not certified in the course areas to be offered. When new courses are implemented, local school officials may ask the current teacher of an elective course, for example, to teach the new course, sometimes creating a situation in which the teacher is teaching out-of-field. At the same time, state reform efforts have encouraged local districts to reduce out-of-field teaching. Although most local officials interviewed claimed that the problem of out-of-field teaching has not been seriously exacerbated by curricular reforms, in several states, state officials believe that out-of-field teaching is still a serious problem, especially in the rural areas.

In addition to expanded curriculum offerings, mandatory class size reductions and class size caps have had a special impact on small, rural schools. In some cases, class size mandates require schools to create classes with small student-teacher ratios. Some local officials challenged the wisdom of absolute class size caps. Consider the following lament from a Kentucky instructional supervisor: "Class size mandates were hard to follow!!! Once, we had to employ a teacher because there were 2 kindergarten children over cap size. The following month 3 moved away. And this little district didn't have the money for an extra teacher!" Another local official, a principal, complained that requirements for remedial classes and special education classes meant that staffing had to be increased substantially and that, while teachers were not hard to find, "breaking in a bunch of new teachers has taken a lot of my time."

In general, however, school officials actually were pleased with the effect of the curriculum and other mandates on rural school systems. The impression local school officials left with interviewers was that many of these requirements were, as one superintendent put it, "long overdue." He went on: "We in the school system have been wanting to do these things but we couldn't always get support for more courses and more teachers. Now the state is telling us that we must improve our courses, hire more teachers and reduce class sizes. This lets us go to the school board and the community and get the resources to do what we have been wanting to do for a long time."

Teachers and Teaching

Three issues dominated debate over education reform measures relating to teaching and teachers: teacher preparation and recruitment, professional development and instructional improvement. In interviews throughout the region, state and local officials were optimistic that reform measures would improve teaching, but most officials believed that it was "too early to tell" whether or not these measures were having significant effects in rural schools.

(1) *Teacher Preparation and Recruitment.*

In the area of teacher preparation and recruitment, state officials reported spot shortages of qualified teachers in subject areas such as science, mathematics and foreign languages, especially in rural areas. Local officials interviewed, however, did not express concern about the availability of teachers, even though they were hiring more teachers than in previous years because of statewide mandates to improve curriculum. As one local superintendent remarked, "No, I haven't had difficulty in recruiting teachers, even in science and math. I can't tell you about the quality of those new teachers yet, but I haven't had any problem finding them." Another superintendent whose primary recruitment efforts are focused on teachers who were formerly students in the local system commented, " This is actually the first year in the last ten that I have been able to fill all new teaching positions with people returning to our county." She cited family and community connections and the desire to return to the rural lifestyle as motivating factors in bringing teachers back to her rural, mountainous and very scenic location.

State officials remain concerned about the supply and quality of teachers for rural areas. In Pennsylvania, for example, the legislature created an Academy for the Profession of Teaching which brings to bear the resources of the system of higher education on the issue of teacher quality

and supply. One of the major projects of that academy this year will be a rural education initiative, designed to acquaint students and faculty in teacher preparation institutions with the unique problems and challenges in rural areas. In Mississippi, a major concern continues to be training and recruitment of teachers for rural areas, especially minority teachers. At the local level, few would speculate about the quality of newly hired teachers.

Some local officials said that they were using the probationary period mandated by state education reforms to ensure that new teachers could operate successfully in the rural classroom. As one principal commented, "There's a world of difference between college training and actual classroom experience. This probationary year lets me look at new teachers to make sure that they can really cope with a classroom full of students." When pressed, however, few local school officials admitted that they had actually "washed out" probationary teachers. "We work with them," said a local superintendent. "In a small community, you don't ask someone to come back to a small town to teach one year and fire them the next."

(2) *Instruction and Professional Development.*

Virtually all state education officials interviewed believe that, in the long run, state requirements for professional development among teachers are very important to better teaching. By focusing teachers' attention on instruction in the classroom, they believed, the state was helping to increase the time spent on actual instruction and the day-to-day preparation of teachers.

Although statewide education reform measures did not directly specify behavior in the classroom, they have had an indirect effect on how teachers teach. New evaluation systems stress classroom preparation and "time-on-task." Testing stresses teaching specific "competencies", which in turn helps to discipline teachers' approaches to their subjects. Testing also provides more frequent feedback about student performance individually and among groups, enabling principals and teachers to adjust the composition and content of classes and courses. State officials believed as well that increased in-service training and the "mentoring" activities of master teachers will improve teaching practices in the schools.

Teachers in small, rural school districts interviewed for this study agreed with these expectations, at least in part. Several teachers praised in-service training programs focusing on new ways to manage in the classroom. Others felt that although the emphasis on written lesson plans and other disciplined approaches to teaching created additional paperwork burdens, the effect on their teaching has been beneficial.

Surprisingly, teachers and principals interviewed did not object strenuously to the substantial emphasis on student testing that has become a centerpiece of statewide education reforms. As one South Carolina teacher commented, "Most of us have worried about whether we would begin to teach the test or spend too much time on things we knew would be on the tests. Teachers may have done that to some degree, but we also feel like the test has helped us focus our attention on knowledge and skills that are important."

One of the most important effects of the statewide reforms on rural schools was an emphasis on identifying specific competencies to be taught. This identification resulted in

teachers having a better idea of which parts of the large body of possible curricula should be emphasized in any school year. In the process, principals and teachers interacted more effectively to identify specific objectives for teachers. Teachers, in turn, were able to prepare lesson plans and course materials more effectively. Aware that they would be evaluated on their ability to teach specific competencies, teachers have been able to prepare better for class and feel more comfortable about being evaluated. An Alabama 11th grade teacher spoke to her improved relationship with the principal: "With better definition of what I am supposed to teach, and better measurement of achievement among my students, I feel more confident when the principal evaluates me. Because of this, principals and teachers in our system seem to work better together and spend more time looking at teaching objectives." A Mississippi teacher in a small, rural school commented on increased emphasis on lesson planning: "We have to do more paperwork, but we are paying more attention to teaching specific skills to our students. It is harder to do the paperwork, but the teaching is easier."

Principals in small, rural districts also seemed to appreciate the increased focus on learning objectives engendered by school reform. In particular, their abilities to conduct evaluations of instructional personnel seem to have been enhanced by the combination of focus on essential skills, the feedback from student testing and the increased training of teachers. A principal in Mississippi commented: "Now, when I evaluate a teacher, the evaluation is conducted in a more disciplined way. The disciplined review is usually highly positive. I can help a teacher focus on imparting the essential skills in that particular grade or course."

Not all principals and teachers were as positive about the reforms, however. Several principals expressed concern that student testing might be exerting too much influence on the instructional process. One principal expressed this concern: "Each time we get near a test, the teachers abandon what they are doing and really work their students on things that might be on the test. I think we've gone overboard on standardized tests."

Both teachers and administrators expressed doubts about the effectiveness of merit pay or career ladder plans in changing significantly the practice of teaching in the classroom. One school official put it this way: "We are willing to try career ladders, but we don't kid ourselves that creating a few master teacher slots will improve the overall quality of teaching in this school. Basically the same teachers will be teaching the same kids next year, no matter what we call them or what we pay them." Several teachers also had doubts about singling out "good teachers" through career ladder plans. "We all think we are good teachers and we're all trying to teach well," a teacher said. "Even if I could be a master teacher, I don't know that I would automatically do a better job."

At the same time, fears that career ladder plans or merit pay alternatives would disrupt schools appear to have been overwrought. A superintendent in a state with a statewide career ladder plan noted: "All that hassle about career ladder has died down. We're about back to normal."

The issue of rewarding some teachers and not others may be particularly difficult in a small school or small school system where the number of teachers is small and everyone knows

everyone else. When asked whether any of the statewide education reforms had been abandoned or scaled back, state officials cited personnel evaluation and career ladder or incentive pay programs for teachers as the most difficult areas of implementation. In particular, they said, rural school districts seemed to be having more difficulty in these areas than other school districts.

One of the critical questions facing not only rural school systems but the entire public school system in Appalachia is whether or not statewide reforms have actually had a significant impact on the quality of teaching in the classroom. When this broad question was posed to both state officials and local school personnel, the answer was tempered. As one education policy advisor in South Carolina said: "Well, test scores are up, so we know that some improvement is taking place. But whether or not that improvement is because teachers are better prepared and are teaching more effectively is not clear. We have seen test scores improve more dramatically in rural schools than in many others. Is this because teachers there are teaching more effectively or because standards had dropped so low that attention to basic skills and the testing program are having an effect on students? It's really too early to tell."

Local officials emphasized the fact that test scores are up and are showing significant improvement. Over 55 percent of superintendents commented in the SRA survey that the state mandated reforms had resulted in a measurable impact on the quality of instruction. In most cases the direction of the improvement was positive. One superintendent summarized the comments of many others: "The impact has been positive, but this is difficult to measure other than through improved test scores." Others felt that instruction was more organized, teachers were more aware of the need for students to be better prepared to go to college, and that teacher evaluations show an improvement in instructional processes. One superintendent from West Virginia cautioned: "Only staff development initiated locally can improve instruction. Raising teacher salaries does not improve instructional quality."

Programs for Special Populations

Many of the education reform packages implemented in the Appalachian states included mandates for remediation, enrichment programs for gifted students and increases in resources for special education. In addition, states have begun to address the problems of dropouts and students at risk of dropping out as a group deserving special attention. The implementation of these programs for special groups of students has meant both opportunities and problems for small, rural schools.

(1) *Programs for the Handicapped.*

The advent of special education programs has brought many students who were previously underserved into the mainstream of the educational process. State officials cited the increase in service to handicapped students, both the developmentally disabled and those with physical handicaps, as a major accomplishment — one that was proceeding even before the education reforms of the 1980s.

Special education involves a screening process to identify students who require special attention, the development of individual education plans for each special education student and

a combination of special classes and integration into the regular classroom schedule. Because it is relatively intensive and involves individual attention, special education is expensive. Special education teachers are in short supply and in many small, rural schools regular teachers are used to teach special education classes.

Rural schools, like many others, have had to add teachers and classrooms to accommodate special education students, but they seem to have found major benefits in doing so. Several local school officials reported that the effect of special education funding from the state was positive. "In the past, we really didn't know what to do with many of these kids," said one superintendent. "Now we have some funding and a program to help handicapped students. This helps not just the handicapped kids but the system as a whole." A principal of a very small elementary school commented: "Since we have had special education programs, parents are more willing to admit that their children have problems and need special help. The stigma of being 'retarded' or 'slow' has been reduced. For some children from 'way out back', this is a real blessing. We have seen the number of special education children in our school go up in each of the last few years. I think it is very positive."

Approximately 49 percent of superintendents who responded to the *SRA* study indicated that they had implemented changes in school policy or operations related to programs for the handicapped. Not all felt that the effects were positive. One superintendent remarked that "Classroom time spent with regular education students has been reduced due to mandated mainstreaming of special education students." On balance, however, increased emphasis on handicapped students was seen as a benefit to the schools and the students.

(2) *Programs for Gifted Students.*

In addition to programs for students requiring special education, eight states in the region required local school districts to offer enrichment programs for the gifted. Sixty-eight percent of the school districts which responded to the *SRA* questionnaire indicated that they had implemented policy or operational changes in the area of programs for the gifted. According to state regulations, gifted and talented students must be identified by a variety of means, but most schools in practice use IQ tests as the primary screening device. To be "gifted" a student must usually score 130 or above on a standard IQ test or demonstrate special talents such as art or music.

In large school districts, it is convenient for schools to create special enriched curricula for gifted students. A teacher may be assigned to a "gifted class" in the elementary grades or special enriched courses may be offered to gifted students in secondary school. Often, these students are treated to more independent study, assigned special projects and other learning experiences outside of the school environment.

For small, rural school districts providing instruction for gifted students is difficult for two reasons. First, it is difficult to identify enough gifted or specially talented students to warrant special classes. In a rural school district an elementary grade may include only one or two gifted students. An entire school district may identify only 10-20 gifted students. As a result, these

districts must either join with other surrounding districts to achieve a critical mass of gifted students or they must find other ways of enriching the educational experience of these students.

Second, finding instructional personnel to provide enrichment to gifted students is more difficult, especially in the secondary schools. Without enough students to warrant hiring instructors in upper level physics or mathematics, for example, small, rural schools are often at a loss as to how to provide the enriched curriculum required to challenge gifted students. Just as rural school districts have had to look to the states for remotely produced courses to meet some of the required courses for all college-bound students, they have had to reach out to provide enrichment for gifted students. As a result, some states have used regional education organizations, such as the Intermediate Units in Pennsylvania or the regional offices of the Department of Education in North Carolina, to provide itinerant instructors for gifted students. Another approach has been the creation of special schools — often called Governors' Schools— which offer enriched curriculum for gifted and talented students either year round or in the summers.

Although small, rural schools have had some difficulty in meeting their responsibilities to gifted and talented students, many local school officials praised the statewide mandates to attend to gifted students. Part of this acceptance of the gifted student mandates relates to the political and social support in small communities for other education changes. A superintendent from a small community put it honestly and succinctly: "Establishment of programs for the gifted has helped us gain support from the community for other changes. Gifted students tend to come from the leadership families in our county. If we can provide something special for their kids, they tend to be more comfortable with spending money on remediation, special education and other programs for the poor kids."

(3) *Remediation.*

When state policymakers designed education reforms that raised standards in the schools, they recognized that special help would have to be provided to students who came to school ill-prepared or had fallen behind. Simple fairness required the availability of remedial education if standards for graduation were raised, if minimum competency tests were to be used and if student performance were to be improved. Indeed, with students being tested in the elementary as well as the secondary grades, adequate information should be available to schools to help target their remedial efforts. With early knowledge of those needing special assistance, students should not be allowed to fall far behind. As a result, most states in the Appalachian region required local districts to provide remedial education to students and they provided significant financing for remediation as well.

State officials believe that the remedial programs in local schools are among the most important elements of school reform. They are also very concerned about the effectiveness of remediation in rural schools. Rural schools probably have the most need for remedial programs, state officials said, because of the relative lack of preparation of children entering schools and because of the relative sparsity of family and cultural support for learning in rural areas. State officials are pleased, however, at the degree to which rural schools are implementing remedial programs and point to the improvement in test scores in rural schools as one indicator that remediation in rural schools is having an effect. As one education policymaker from a southern

state commented: "We believe that part of the improvement in test scores throughout the state — but particularly in rural areas — results from the millions of dollars we have put into remedial programs."

At the same time, state officials worry that remedial programs are spotty and do not all use the optimum technologies and instructional methods. One state official noted, "Some of the remedial programs in small schools are just glorified study halls. Others use computer-based, individualized instruction and can produce amazing results." School officials are also concerned about the effect of taking many students out of regular classes to receive remedial instruction. A local school superintendent commented: "Remedial programs are fine, but remedial classes take time from regular instruction. There is a tremendous amount of movement among our students, going from one special class to another. This sometimes disrupts the orderly process of education."

In part to address the question of disruption of regular class work for remedial programs, some states have provided funds for summer schools and after-school remedial programs. In North Carolina, for example, students are required to attend summer school if their scores on standardized tests fall below the 25th percentile. In effect, statewide education reform measures are extending the school year for many students in the Appalachian region who have fallen behind and need extra help to catch up. Sixty-six percent of school districts responding to *SRA*'s questionnaire indicated that they had implemented revised or expanded remedial programs in their schools.

Remediation was also a key element in education policymakers' approach to reducing the dropout rate. State officials hoped that by helping students catch up to their peers, the cycle of failure in school leading to the student's decision to drop out of school might be broken. As yet, the dropout statistics do not seem to validate this expectation. While more students who make it through school are passing minimum competency tests, for example, remediation does not seem to have had a significant effect on the dropout rates in the Appalachian states. Nevertheless, local school officials remain hopeful. A principal of a medium-sized high school commented: "We haven't seen the full effects of remedial programs, especially those in the early grades. We can spot a potential dropout as early as third grade - often even earlier. If we can help these kids stay with their classes, we will have a better chance of keeping them in school in the tenth, eleventh and twelveth grades."

Remediation in the early elementary grades has raised some questions among both state and local officials. They wonder whether providing remedial programs for first, second and third graders should be necessary, or whether — as one state official put it, "Shouldn't we be investing in early childhood education instead of remedial education for first graders?" A teacher also criticized the necessity for starting remedial work in the very early grades: "Some of these children in my third grade class already need extra help in reading, not because the first and second grade teachers were doing a bad job but because they came to school so far behind and get so little support from their parents. If someone would pay attention to these children before they come to school, we would have a much better chance with them after they get here."

According to local officials, the benefits of special programs for the handicapped, gifted and talented students and of remedial programs are substantial. Drawbacks for small, rural schools include the disruption of some regular class schedules and finding teachers to teach the special classes. In some small schools, the percentage of children in special programs is a substantial fraction of the entire enrollment. State officials are concerned about the causes of increasing percentages of special education enrollments, for example. Local school officials are also looking for more funding and other resources to improve these special programs. Since most of these programs involve a lower student-teacher ratio than regular classes, their implementation has been relatively expensive, making them very dependent upon funding from state and federal sources. Programs for special populations in the future will probably continue to depend on outside initiatives.

Improving Student Performance in Rural Schools

All of the education reform measures enacted and implemented during the 1980s were ultimately aimed at a single purpose: improving student performance. Although the final evidence is not in about the full effect of the reforms, it appears that student achievement has improved in the few years that reform efforts have been underway. One of the critical questions addressed in this study has been the effect of statewide reforms on students in small, rural schools and on their performance in school. Measures that directly affected rural students included the implementation of large scale testing, changes in course requirements for graduation, establishment of separate "tracks" and different types of diplomas, restrictions on extracurricular activities and programs for special populations. In addition, some policies were designed to prevent students from dropping out of school.

Over 60 percent of superintendents who participated in SRA's sample of small rural school districts in the ARC region felt that the state mandated education reforms had resulted in improvements in student performance. In almost all cases, this improvement was measured by increases in test scores.

Testing and Student Performance

State officials were nearly unanimous in supporting the widespread testing of students. Statewide test scores have improved each year since the reforms were put in place. State officials believe that the testing programs have many benefits, not the least of which is providing state education leaders with information about how well reforms are being implemented in various areas of the state. In many states, test scores have improved most in small, rural school districts. State officials expressed several reasons why rural schools might have improved test scores substantially. Among these are:

- *Students in rural schools have learned how to take tests.*

Students in rural areas are now tested much more often than previously. As one state official said, "Urban and suburban kids were tested a lot more than rural kids even before the statewide mandates for tests. College-bound kids know that learning how to take a test is an

important skill to acquire, and more students in urban and suburban districts are college-oriented. We think that part of the improvement in test results in the rural areas is due simply to practice."

• *Teachers in rural areas are focusing more on specific competencies and knowledge that they know will be on the tests.*

Although some local school officials are worried that teachers may be spending too much time "teaching the tests," state policymakers are not as concerned. "At least these kids will know the knowledge that is on the test," said a legislative staffer. Others pointed out that the existence of tests forces teachers and schools to focus more carefully on imparting specific knowledge and skills. Both state and local officials judged this aspect of testing to be positive for students.

• *More time is being spent on instruction .*

Students in rural areas are working harder in school and face fewer classroom interruptions. A state official who had been responsible for monitoring a "no classroom interruptions" rule commented: "You would be amazed at how much time we saved for instruction by simply banning unnecessary classroom interruptions. Until we got pleas from a whole variety of groups wanting students' time — to give blood, talk about careers, raise funds, etc. — we had no idea how much time in the average school day we could liberate for instruction." Restrictions on extracurricular activities and athletics during the school day had a particularly beneficial effect on instructional time in rural areas, according to many state officials.

In the years since the implementation of large scale testing, achievement test scores as well as the passing rate for minimum competency tests have increased in several states. Most of that increase occurred during the first two or three years, however, according to state officials. In South Carolina, for example, state education officials note that while test scores are up, a levelling off of the rate of improvement can be seen in the last two years. Mississippi officials report the same levelling off of the most recent test scores.

State education policymakers believe that while improvements in test scores in rural areas have been relatively dramatic, future gains will be hard-won. "We haven't seen the end of gains in the rural areas, by a long-shot," said one state official, "but it will take time for many of the long-term effects of our reforms to have an impact, especially in rural schools." He cited the impact of teacher training improvements, professional development for teachers and career ladders as examples of longer-term reforms whose impacts are likely to be slower to develop in rural areas than in other areas of the state.

The impact of testing on small, rural schools is difficult to quantify, but improvements in test scores are clearly having a positive effect on morale. Where scores have not improved, considerable community pressure can result. A local superintendent noted that "we have improved our test scores in each of the last three years. We have schools in our district competing for the best scores. These scores are one way of saying to the leadership of our community — including the folks who set our tax rates — that we are serious about doing a good job."

State officials believed that the careers of some local school administrators are beginning in part to depend on whether or not the test scores are improving. In one instance, a local

superintendent in a rural district who had been very critical of the statewide mandates was forced to retire by the local board. "We find new leadership in the rural areas, and I think that publishing test results is part of the reason why," said the state official. Another superintendent was quite disturbed about the fact that in spite of education reforms in the past several years, test scores in his school district had declined somewhat. State officials felt that this was a good sign — that now local administrators will begin to ask why test scores aren't improving and will be held accountable for the consequences.

Student Choices

One of the effects of education reform on urban and rural students alike is that they are being asked to work harder and make more responsible choices about their own education. Students have also been restricted in many school districts from participating in extracurricular activities, including athletics, if they are not succeeding academically. In small, rural districts these choices and restrictions are having a significant impact on how students perceive their educational opportunities and on how they spend their time.

In several states in the region, education reform has raised high school graduation standards while differentiating among several types of "tracks" through secondary school. In Alabama, for example, three different types of diplomas are available through three sets of courses in high school. These are the academic track, which usually includes the college-bound, the general track and the vocational track. Many other states in the region also require students and their families to make choices about which track they are pursuing. In the past, these choices could be delayed or could be changed more easily because required courses for one type of diploma or another were not as numerous or demanding. In raising graduation requirements, states have in effect required students to set their sights on one type of diploma or another at an earlier age — usually by tenth grade — and have made all of the tracks more demanding.

In some states, vocational educators fear that raising standards will reduce vocational enrollments. Because more units of academic courses are now required for graduation, students might choose not to opt for the vocational track or to pursue vocational courses as electives. In most cases, however, this decrease has not materialized. The effect of higher academic standards on vocational enrollments may have been blunted by state decisions to count certain vocational courses as required units for graduation. A vocational course with a strong math component, for example, can be counted as a unit of math toward graduation. State officials reported that vocational enrollments have been stable or have grown in most states. In a few states, notably New York, new requirements do appear to have resulted in reduced vocational enrollments. Part of the problem in New York appears to be that increased graduation requirements and increases in the number of required instructional hours do not permit the time required to commute to area vocational schools.

Since vocational education has long been an important component of rural education, concern over the effect of education reform measures on vocational education is strong in small, rural school districts. A local superintendent remarked about the relationship of vocational education and rural education: "Look, many of our kids are not oriented toward college.

Vocational programs give them hope that they can get a better job than their parents. Vocational education helps keep these kids in school. If the effect of reform is to gut vocational education, and focus attention only on the kids definitely headed for college, then we are in trouble." Most state and local officials did not share the fear that statewide reforms might seriously damage vocational programs. A southern state education official remarked: "So far, vocational programs are holding their own, especially in the rural areas. We think this may be happening because rural kids still see a job as a more likely outcome of their public school education than going to college. And they know that they have got to have some skills to avoid spending their lives flipping hamburgers."

Dropout Prevention

One of the most crucial choices rural students have to make is whether to stay in school. Rural areas tend to have higher dropout rates than all but the poorest urban districts. State and community leaders are recognizing the close linkage between students finishing high school, employability of the local labor force, adult literacy and economic development. Dropout prevention was not a major policy focus of the first wave of education reform, but more recently has become a serious challenge for education policymakers.

In designing the education reform packages of the 1980s, policymakers were concerned that raising standards might actually increase the dropout rate, making school more difficult for those students at risk of dropping out. Remedial programs and special attention to students in the early elementary grades were justified, in part, as ways to reduce the dropout rate. If students could be helped to keep up with their own classes in school, they would be less likely to be discouraged and drop out. At the same time, policymakers designing incentive programs for the schools realized that if test scores were the only yardstick for success, the tendency of schools might be to allow low-performing students to drop out, possibly increasing the dropout problem. In general, however, the dropout issue was not addressed directly, in part because no easy solutions are apparent to the stubborn problem: about 30 percent of 9th graders do not graduate from high school.

The Appalachian Regional Commission and others have conducted research and sponsored programs to attack the dropout problem. A number of states — notably North Carolina, Kentucky, Maryland, New York, Pennsylvania and West Virginia — have appropriated funds to address the dropout issue, but no states in the region have adopted comprehensive policies to prevent high school dropouts. Most of these funds have been allocated for programs based on one of two models for dropout prevention.

The first model includes counselor-based programs, in which students at risk of dropping out are identified and special counseling and remediation is provided. In some programs, at risk students are identified as early as the sixth grade, but most programs concentrate on eighth - tenth graders, since most students drop out between ninth and tenth grades or tenth and eleventh grades. Counselors work not only with the students but with their parents to help the students do well in school and to reinforce positive role models for the children.

Using a second model, school districts have opened or expanded alternative schools programs for those most likely to drop out. Usually a last-ditch attempt to keep students from leaving school, these alternative school settings group "at risk" students, give them special attention and attempt to provide the full range of academic courses needed for graduation. Alternative school settings take a variety of forms, ranging from a single floor of a school building to an entirely separate school. Tennessee and Kentucky have provided funds for these types of programs.

Interviews with state officials revealed a deep concern for the dropout problem but perplexity concerning exactly how to address it from a statewide perspective. "We are all trying to get the dropout rate down," said one state education leader, "but this can only be done at the local school level. We are giving schools financial incentives to reduce their dropout rates, and some are concentrating hard on this task. In general, however, schools seem to be working harder at improving test scores, for example, than at preventing dropouts."

The economic prospects of a community and the expectations of parents influence whether students will drop out. "In a rural area, if parents have not finished high school and employers don't require higher level skills, it's hard to convince students that they need to finish high school. Teachers and counselors will tell students that they need to stay in school to get better jobs, but the kids know that those better jobs just aren't available in their area. In some of our depressed rural areas, those skilled jobs just aren't there," remarked a state school official. A local school board official from a depressed, rural county in a coal mining area commented: "We just lost 350 jobs in this county last week when a coal operation closed down. We've been losing jobs for the past five years. It's difficult to keep people interested in education when jobs are not there. There is a chance that a wood-pulp operation will open, but these jobs will not be high paying or high-skill jobs. Children see their parents barely making it in these hills with a 6th grade education. The parents don't encourage them to stay in school. They may be satisfied and proud that their children have made it through ninth grade. Having hope is an important part of staying in school, and many of these kids have so little hope."

At the other end of the spectrum, a booming rural economy can also have a negative effect on the high school retention rate. A local superintendent from a growing rural area noted: "Our county just attracted one of the largest manufacturing plants in the state. Next year they will build a million appliances in our county at that one plant alone. Jobs — relatively low-skilled jobs — are available. Schools have a hard time competing with those jobs. Kids can drop out of eleventh grade and go get a job, buy a car and make what for them and their parents is a lot of money. But then, they don't really think about what the future holds."

In Murray County, Georgia a novel approach to this problem has emerged. Convinced that the future of economic growth in the county is tied closely to the performance of the schools, a local employer recruited virtually all other employers in the county to pledge that they would refrain from hiring young people of high school age unless they were in school or seeking a GED. Apparently, this initiative did not originate with the schools, but the local superintendent expressed strong support from the school system. Learning of the program in Georgia, another local superintendent commented: "If we had that kind of support from the business community, we would make a real dent in the dropout rate."

Most local school officials interviewed expressed concern about dropouts but offered little more than "we're working on it" as an approach to preventing dropouts. Some pointed to remedial programs and early identification of "at risk" students as hopeful approaches. Many blamed the parents and the cultural expectations of small, rural communities for encouraging dropouts. "If we could involve the parents more in their children's education, we could prevent kids from dropping out. But many parents in our area just don't value education," said one high school principal. Another school leader commented: "Kids around here have been dropping out of school for years. If they don't have their eyes on college or are not taking vocational courses looking for a specific kind of job, they just don't see the benefits of staying in school."

While attributing high dropout rates in rural areas to economic and family circumstances, some state officials were not quite so willing to absolve the schools themselves of blame for the dropout problem. A state education policymaker in a governor's office commented: "It's all well and good to blame the parents and the economy for dropouts, but the fact that over 30 percent of our students drop out before graduation says something about the very structure of our education system. The way schools are organized, the way classrooms work and the way teachers teach has something to do with the fact that we are not reaching nearly a third of our kids. We're not keeping them excited about learning or showing them a payoff for staying in school. I think the dropout rate is a signal that more radical reforms are necessary before we are finished with the job of reforming the schools."

Education Reform and Financing Rural Schools

Each state in the Appalachian region has a unique system of financing its public schools. General approaches range from state aid based primarily upon teacher salaries to state aid formulas that are based on relative taxable wealth in local communities. The state-local mix of financing varies as well. States in the region provide from 35 percent to 69 percent of the total revenues of local schools on a statewide average. In all the states in the Appalachian region, the local property tax is the primary source of local funds, although some jurisdictions allow localities to impose other types of taxes such as occupation taxes or sales taxes to help support the schools. Table 8 illustrates the dependency of local school districts on state aid in the Appalachian states. In eight of the thirteen Appalachian states, local school districts are dependent upon state aid for more than half their revenues.

TABLE 8
PERCENTAGE OF LOCAL SCHOOL REVENUES
FROM STATE GOVERNMENT
1986 - 1987

State	Percent
KENTUCKY	69.4
ALABAMA	69.4
NORTH CAROLINA	63.6
WEST VIRGINIA	59.8
SOUTH CAROLINA	57.5
GEORGIA	56.5
MISSISSIPPI	54.9
TENNESSEE	50.4
OHIO	46.6
PENNSYLVANIA	45.7
NEW YORK	43.2
MARYLAND	39.3
VIRGINIA	34.6
NAT'L AVG.	50.1

SOURCE: National Education Association, *Rankings of the States, 1987.*

In general, small, rural school districts are even more dependent on state aid for their resources than other districts, primarily because local property tax bases are limited. In addition, rural areas have been traditionally reluctant to tax themselves heavily to support public schools. Financing schools in rural areas is usually a matter of calculating state aid and then trying to find the local funds necessary to make the school budget adequate.

Although state policymakers in most cases combined large increases in state aid with state education reform mandates, state aid did not pay all the incremental costs associated with reform measures. As a result, small, rural districts have found themselves under varying degrees of fiscal pressure resulting from the reforms. In states such as Mississippi, where state aid is not distributed on an equalized basis, these fiscal pressures have become severe. In other states, such as Georgia, where state aid has been increased and passed through to poorer communities on an equalized basis, the fiscal pressures on rural districts have not been as significant, but nearly all rural school districts have had to increase their local fiscal efforts in order to implement statewide school improvement programs.

One of the purposes of this study was to determine whether this increased fiscal pressure had caused major problems for rural school districts, whether local fiscal priorities had been changed as a result of reform, and whether new state fiscal policies might be needed to

accommodate small, rural school districts. To address these issues, it may be useful to examine the unique characteristics of the fiscal pressures felt by rural schools.

Several of the fiscal facts of life in small, rural schools exacerbate the fiscal pressures created by reform.[3] These include:

- *Relatively high per-pupil costs for pre-reform programs.*

Per-pupil costs in rural areas are driven up by small class sizes in some courses of study, high transportation costs resulting from the geographical spread of many school catchment areas, and the lack of economies of scale in purchasing. Partially offsetting these factors are relatively low teachers' salaries.

- *Costs of improving a limited curriculum and lowering class sizes.*

Expanding curriculum and limiting class sizes are costly to rural districts, once again because the student population base is not large enough to spread the costs among many students. In addition, the cost of special programs for remediation, and for the gifted and talented are relatively high, in part because of the lack of a "critical mass" of students.

- *Possible inefficiencies created by very small enrollments in some schools.*

In some small rural districts, school sizes can become so small that administrative overhead and instructional costs rise far above the district averages. Geographical factors and community tradition may keep very small schools open, despite their apparent inefficiency.

- *Costs of establishing new programs mandated by the state.*

While urban and suburban schools may already have established programs for the gifted, remedial programs and curriculum enrichments such as advanced placement courses, many small, rural school districts have needed to begin entire new programs to implement statewide reforms. Since the costs of expanding existing programs are less than creating new ones, small, rural school districts have incurred higher costs for a variety of reform-mandated programs than other districts.

Despite efforts at the state level to provide most of the new resources required by statewide reforms, many rural school districts report that new local resources were required to implement statewide reforms. Over half of the districts responding to a survey on the implications of statewide reforms reported that they had allocated additional local funds specifically to finance statewide mandated education reforms. Local tax increases were necessitated by statewide reforms in 47 percent of the school districts responding to the survey. In about a quarter of the responding districts, local bond issues were approved to implement reform measures. Many local districts also reached out to the private sector in search of new resources. In about a third of the districts, local funding innovations such as corporate donations, adopt-a-school programs or other public-private educational partnerships were implemented.

In responding to the fiscal pressure caused by statewide education reform, only about a quarter of the districts reported that they had reallocated funds from other priorities to meet state mandates. Only 13 percent of the responding districts actually eliminated some programs in

order to make room in the budget for statewide reform programs. It appears that most statewide reform measures were added on to the budgetary base in rural districts, as they presumably were elsewhere. This incremental approach makes common sense, since many small, rural districts were operating with minimal resources before the enactment of the reforms. Local superintendents interviewed for this study validated this response to the reforms. "We've had to increase the millage rate here to make do," said a southern school superintendent. "We looked for savings but didn't find much to cut."

Local tax increases in about half the responding districts are an indication of both the fiscal pressures brought by reform and the increased public support generated by statewide campaigns for school improvement. Local school officials reported a much greater willingness of taxing authorities to support tax increases, especially if school officials could document the relationship to state mandates. Indeed, the education reform movement seems to have given school officials more courage to seek local resources from local taxpayers. A school superintendent in a multi-school district county commented: "All of the districts submit their proposed millage to the county, and lately the county officials have pretty much approved them. Even so, there is a wide difference in tax rates among the five districts and ours has traditionally been the lowest. That's because our board has been timid in asking for funds. With the need to add programs to meet the state requirements, our board has suddenly gotten braver and we've received budget increases the last three years."

Local school officials also reported that state mandates were persuasive to local taxing authorities when additional resource were needed. A local superintendent commented: "I just finished balancing my budget. It was tough. The state mandated raises in teacher salaries and provided the money for the minimum foundation but I have 19 teachers above the minimum. I had to find the money. I told the county commissioners it was a state mandate. I blamed it on the state."

In states where statewide education aid is not distributed according to relative local wealth, fiscal pressures on small, rural districts have been severe. "Some of our rural districts are just plain facing bankruptcy," said a state official. "State aid will have to be redirected to the poorer rural districts. A new education aid formula has been a high priority of the state Board of Education for the past five years. Sooner or later the legislature will have to address this issue." A local school official from an economically depressed county in another state called for more targeted state aid: "We need full funding of the power equalization formula which would direct more state aid to counties such as ours. I can't ask for more taxes here when the economy is on the way down. We lost hundreds of jobs in the coal mines over the last few years, and people don't want to hear about more taxes."

Time after time the superintendents responding the the *SRA* questionnaire on the effects of state education reform mandates on small, rural schools repeated the litany of the lack of resources. In Georgia, one superintendent summarized many other superintendents' views that "... mandated changes have come about much faster than funding necessary to carry out the changes. Additional reforms will require additional money."

Although local school officials expressed concern over the fiscal pressures created by statewide reform, few believed that local districts could not adapt to the new requirements. Even in districts that were economically depressed, school officials expressed the hope that additional state aid plus some modest additional local resources would get them through the first round of statewide mandates. Prospects for additional local resources were dim, however, particularly in the economically distressed counties. "If they ask us to do much more, I don't think the taxpayers will stand for it, " said a local tax official in an economically depressed county.

Public Support for Education in Rural Areas

As governors and legislators will testify, education reform has been engendered by deep public concern about the quality of public schools. At the same time, statewide education reform movements have generated increased public support for the schools. An important element of this support has been the ability of leaders to portray in the public arena the relationship between economic development and quality education. In rural areas of Appalachia, the importance of community support for and involvement in the schools can hardly be overstated.

A consistent finding of this study is that community leaders in small, rural areas are increasingly supportive of school improvement. They deeply believe that education improvement and economic development for their areas are closely linked, and that long-term investments in the public schools are warranted as long as schools are seen to be improving. Support has been growing for education throughout rural Appalachia.

State officials were unanimous in citing a significant increase in public interest in and support for education reform. "Our political leadership has done an excellent job in convincing the people that education is equated with economic development and jobs," commented a statewide school leader, " and now we have to produce." Asked whether this increase in public awareness and support has extended into small, rural school districts, some state officials interviewed expressed the belief that support for school reform among citizens was the highest in rural areas. These state officials believed that community leaders in rural areas with eroding economies are particularly supportive of school improvement. Commented a legislative staff member: "These folks have seen their towns dying, their kids leaving and their farms in trouble. The governor and others are telling them that improving their schools may be the last hope for improving their economies and their prospects for survival. The average citizen and the community leadership in these small towns are clinging to the hope that education improvement will translate into a future for their communities. I only hope that we are right when we hold out that hope."

On the other hand, many state and local officials feel that hope is indeed difficult to engender in the economically hard-hit rural areas of their states. Where good paying jobs aren't available, it is difficult to convince students to stay in school so they can increase their earning power. Likewise, it is hard to convince community leaders to allocate additional and scarce resources to the schools on the hope that changes they might be able to make in their schools will have anything to do with economic improvement of the area.

Still, most local officials believe that public support for the schools has increased in rural areas. Support for education seems higher not only among school officials but also among community leaders interviewed for this study. "A few years ago, I would not have dreamed of asking for a tax increase to support bonds for a new school," commented one school board member, "but last year we did and it passed overwhelmingly. This could not have happened if it hadn't been for the statewide education reform movement."

While community leaders are more responsive to the needs of the schools, parental involvement is still difficult to generate. "It's not clear that the message has gotten to the parents," said one school superintendent, "but local businessmen, politicians and others are more supportive of what we are trying to do." A parent active in school affairs in a small community commented, "Our PTA attendance is up slightly, but just making a living takes most of the energy of our parents. School spirit has grown over the past few years, though, and more people appreciate academics than before."

One reason that rural districts support the implementation of the statewide reforms is that their representatives were involved closely with the design of reform packages. State policymakers reported that they were careful to involve school officials, businesspeople, legislators and education advocates from rural areas when they put together legislative proposals for education improvement. "Our legislative leadership comes primarily from rural areas," said a state school superintendent, "so the Governor and I were particularly sensitive to the needs of rural schools when the reform package was put together." Another state school official commented: "We couldn't have passed our education reform legislation without strong support from the rural areas. By the time the debate was over, most all the local superintendents from the small districts were for it." A state senator whose district includes several small rural districts commented: "Rural people were involved. I was chairman of the committee that moved the reforms in the Senate. Of course we were involved." Seventy percent of local districts responding to the *SRA* survey indicated that they were aware of and or involved in education reform measures being considered at the state level prior to their enactment.

Chapter 5
EDUCATION REFORM IN RURAL APPALACHIA: AN ASSESSMENT AND PROSPECTS FOR THE FUTURE

Although it is too early to assess all the ramifications of statewide education reform, it is clear that these reforms have brought new energy and commitment to school improvement in small, rural communities. Schools and communities in rural areas are working hard to improve student performance. Although small, rural school districts have experienced some difficulties in implementing statewide mandates, local school leaders report that they have complied with new requirements and are generally satisfied with their progress in improving the schools. Both state and local education officials seem determined, as well, to continue the momentum of reform.

To be sure, state and local officials were not entirely sanguine about implementing statewide reforms in small, rural school districts. Doubts about the efficacy of career ladders and other changes in teacher compensation, concern about the long-term effects of increased testing and the impact of accountability measures on paperwork burdens were expressed throughout the course of this study. Nevertheless, 80 percent of superintendents responding to the *SRA* survey indicated that implementation of state mandates had *not* been scaled back or abandoned due to difficulty in implementation.

Fiscal stresses were evident in virtually every local school district studied. Concerns about the effects of the lack of economic opportunity, the isolation of rural areas and the motivation of students and parents to keep children in school were also dissonant chords in an otherwise positive chorus of reports on the implementation of reforms in small, rural schools.

In general, SRA found that small, rural school districts felt that they were an integral part of the school reform movement, that they could see improvements in student performance and that the initial difficulties in implementing reforms experienced in rural schools were being worked out. When questioned about the future of school reform, state officials and local officials began to part company.

State political leaders and education officials were beginning to make plans for another round of school reforms. Some were planning to fine-tune existing reforms and others are looking for major changes in education policies to take school reform "the next step." Local officials, however, argued for continuity and a suspension of major additional changes to the system, at least until the initial round of reforms could be "digested." "If I had access to the Governor," said one local superintendent, "I would urge him to give it a rest. Give us a few years to work out our problems and don't impose more changes on us. We're working as hard as we can to put in the reforms they just passed."

The Future of Education Reform in Rural Appalachia

No one can predict exactly the shape and form of the next round of education reform, nor its effect on small, rural schools. Interviews with state and local education officials and policymakers do suggest, however, several approaches to problems that continue to confront small, rural schools. *SRA* speculates that the future of education reform in Appalachia will involve measures to deal with the following issues:

- *School finance reform.*
- *Changes in school structures and new approaches to learning.*
- *Changes in the organization and governance of school districts.*
- *Broadening the education reform agenda to include family-based policies.*

School Finance Reform

In many small, rural areas of Appalachia, the imperative for educational improvement is running up against severe resource constraints. During the first round of education reform, states increased aid to localities substantially. In some states, however, increases in state aid were not apportioned according to relative wealth of school districts, and severe financial pressures on small, rural districts were evident. Even in those states with equalized state aid formulas, local officials believe that additional state aid fell far short of the cost of implementing school reforms.

The issue of the balance of state and local resources required for education improvements is perhaps most acutely drawn in small, rural school districts. Local school officials are hard-pressed to find additional resources for school improvement. At the same time, state officials expressed the need for small, rural districts to exert some additional financial effort aimed at improving the schools. "Rural taxpayers are more resistant to spending money on the schools than taxpayers in other areas of the state," said a top education official. "The legislature is going to demand some more local effort before they put a whole lot more money in these schools."

During the first round of education reform, this state-local funding issue was resolved primarily through state actions to increase funding for local schools from the state tax base but little was done to improve the efficacy of school aid formulas. In most cases, state policymakers chose not to address controversial fiscal distribution issues while substantive education reform legislation was pending. Even with increased state aid, however, at least half of small, rural school districts have had to raise taxes. A resurgence of resistance to property tax increases may limit the ability of rural districts to finance major additional school improvements. At the same time, state governments in Appalachia may be reaching the limits of their ability to increase aid to elementary and secondary education in the dramatic fashion of recent years. State officials will want to see more local effort and will want to target additional aid to those districts most in need.

During the next round of statewide education improvement efforts, a mixture of increased local tax effort, state effort to target aid to the poorest districts and additional general state funding will fuel the reforms. It is likely that very expensive programs, such as statewide teacher salary increases, career ladder programs or system-wide mandates for new programs will not be part of

the next wave of reforms in most Appalachian states. To ensure that additional reforms are implemented in small, rural districts, state policymakers will have to find ways to target resources to rural districts with the least prospect for additional local resources.

Changing the School and the Classroom

For all their sweeping effects on school districts, teachers and students, few of the first wave of education reform measures have had deep and far reaching impacts on the classroom itself or on the process of teaching and learning. Most schools continue to be organized as they have been for at least one hundred years and most teachers teach in the same way they have for years. Students attend 45-50 minute classes, receive instruction through standardized textbooks and lectures and they respond much the way their parents did. Despite the introduction of new technologies on a limited basis, the schooling and learning processes are basically unchanged.

Influenced by research on "effective schools", education policymakers are now considering a number of innovations that focus primarily on the structure of the school and the learning process itself. These more radical reforms are unlikely to be mandated. Rather, if they occur, they will be voluntary and will look to innovative school districts and schools for implementation. Already, some school reform proposals have included a combination of moderate deregulation of local schools and the creation of experimental or "benchmark" schools to implement some of the ideas suggested in the effective schools research.

If state policymakers begin to encourage changes in the education process itself, small, rural schools could be ideal places to begin the proposed process of restructuring the schools, because they are cohesive, relatively well-disciplined and small enough for school leaders to manage change effectively. The very attributes which have caused some problems in implementing statewide mandated improvements in minimum standards might work to the advantage of small, rural schools if states turn to a new approach of incentives to innovations in school structures and encourage changes in the basic approach to teaching in the classroom.

These ideas involve restructuring the school to break up the standard Carnegie units, more individualized instruction, application of computer and other technologies to learning and a team approach to teaching. Financing proposals involve providing incentives for schools — not individual teachers or school districts — to improve the overall performance of schools and the students attending them. Performance is defined not just in terms of test scores but also in terms of other measures of a successful school, including dropout rates, teacher attendance, student attendance, student discipline and parental involvement.

The stubborn resistance of dropout rates to improvement has indicated to some education policymakers that the structure of the schools needs to be radically rethought in order to provide learning opportunities to the approximately one-third of students who do not thrive under the current system. While counselor-based and alternative school-based dropout prevention programs will continue to be funded, some states may take more stringent actions to force schools to deal with the dropout problem. School districts may have to change the structure of whole

schools in order to deal with the problems of students who are at high risk of dropping out without lowering standards for other students.

In the classroom, reform proposals envision teachers, teachers aides and new types of instructional personnel giving students more personal attention, perhaps using computer-based instruction, other technologies and aides to liberate teachers from routine teaching chores. Movements to make vocational education more relevant to job opportunities and to upgrade both remedial and technical education for those student who are not college bound are already underway. Remote instructional programs using satellite technology are proposed or are being implemented in many of the Appalachian states. Some proposals also involve decentralizing decisionmaking in schools to give teachers a larger role in instructional management.

Efforts to change cultural and community attitudes toward staying in school may also find a fertile ground in small, rural communities — particularly those that are improving economically. Coalitions of community leaders, school officials and employers to discourage dropouts will be easier to organize in rural areas than in metropolitan centers. If economic development efforts in rural areas begin to show some success, it will be possible to portray schooling not just as a way out of the community but as a way to get a better job within the rural environs. In several of the communities visited by *SRA*, a changing attitude about the relationship of education and economic development can already be discerned.

Similarly, community coalitions to change the schools themselves can be organized in cohesive, rural communities. If incentive programs are enacted at the state level, rural communities will participate if they are competing with similar school districts for funds. In South Carolina, for example, school-based incentives have met with enthusiastic responses from rural schools. These schools compete for incentive funds based on school-wide performance. School officials at both the state and local levels in South Carolina reported that small, rural schools were competing effectively for these funds, in part because they start from a relatively low base in terms of test scores, dropout rates and other measures of performance.

Governance and District Organization

Although school governance and school district consolidation were not the primary targets of the first rounds of education reform at the state level, additional statewide measures to change local school governance and encourage consolidation may be part of future reform proposals. These measures will probably address three issues:

- *School district governance.*

In several of the Appalachian states, state policymakers expressed a belief that the pressures exerted on school districts to improve performance may necessitate changes in the selection of school board members and local superintendents. In Mississippi, Tennessee and Georgia, for example, many rural superintendents are elected. Some state officials believe that more professional administration of schools would be enhanced by moving toward a system of appointed superintendents. In Virginia, many rural school boards are appointed by selection committees established by circuit judges, a cumbersome system to some. Proposals to alter the

governance of local districts may change the ways in which rural school policies are made and implemented in the future.

• *Bifurcation of taxing and operating authorities for many school districts.*

In many states in the region, school tax rates are set by general governments, such as counties, while school policies and budgets are implemented by school boards and superintendents. This system has deep roots in maintaining checks and balances for local taxing and spending policies. In some states, however, legislatures eager to obtain more local funding for schools may allow school boards or other bodies to have more influence on the tax rates or set them by board action.

If these changes are considered at the state level, they will cause controversy, pitting advocates of constraints on local property taxes against those who believe that more local effort is needed to improve schools. In this context, some states may reevaluate their state school aid formulas to provide more funds to small, rural communities that have weak property tax bases. State legislatures may also allow school taxing authorities to levy taxes other than the property tax.

• *School consolidation.*

No issue in education policymaking is more controversial than school consolidation. It is unlikely that state legislatures will impose school district consolidation in rural areas. It is possible, however, that incentives for consolidation will be strengthened. New York, and to some extent Georgia and Mississippi, have offered positive and negative incentives for consolidation of small districts, most of which are located in rural areas. Other states may create incentives for consolidation and strengthen existing ones. It is also possible that state school aid formulas and school construction allocation programs may be adjusted to give incentives for consolidation of districts or consolidation of schools within districts. In Georgia, for example, strong financial incentives for the creation of middle schools allowed some small, rural districts to consolidate operations and build new schools.

Governance questions have arisen because state education policymakers in some states are uncertain about the capacity of local education systems to implement needed reforms. If small, rural communities are successful in improving school performance, many of the issues surrounding governance, taxing authority and consolidation may not seem as important to state leaders. If, on the other hand, school districts are unable to raise the resources and implement school improvements, state policymakers may act in a variety of ways to change the governance and taxing structures of the local schools.

Education and the Family

During the 1960s and 1970s, schools were asked to take on many of the responsibilities that had been neglected by the rest of the society. Desegregation, breaking down barriers among economic classes, providing opportunities and special services to the poor were all areas in which the schools were enlisted by policymakers to help change society. In more recent years, with an

emphasis on "back to basics", education reform rhetoric has avoided proposing the use of schools as primary tools to achieve social change.

Even as this shift in emphasis has clarified the role of the school and focused it on student educational performance, the erosion of the family structure has created a demand in some quarters for schools to take on more of the responsibilities previously allocated to the family. These responsibilities are major ones — ones that many education officials are not sure they want to address — even though they know that these issues are crucial to improving educational performance. They include:

• *Early childhood development..*

The family environment is less conducive to pre-school preparation of children than ever before. Single-parent families or families where both parents work are not providing the kind of early childhood development and pre-school stimulation that many children need to prepare them for school. Do schools need to take more responsibility for early childhood development? If not, then other means of providing pre-school children with the basis for succeeding in school must be found.

For small, rural schools, the expansion of early childhood development programs could bring major benefits. Children would be better prepared for school and more of them would start out at the same educational level when they entered schools. Special education programs might be reduced if learning disabilities and other problems were diagnosed earlier. On the other hand, asking small, rural school districts to organize major early childhood development activities might strain their fiscal and human resources to the breaking point, detracting from other necessary activities in implementing school improvement measures.

• *Providing after-school learning and recreation.*

Millions of latch-key children in both urban and rural areas come home from school each day, lock the door and turn on the television until their parents return from work. Even aside from the issue of supervision, these children are not having their needs met for either physical or mental exercise. Many schools have been forced by budget constraints to reduce extracurricular activities and after-school programs. Do the schools have a responsibility to look after children after school? Should they expand extracurricular activities or summer programs?

These issues will be hotly debated during the next round of statewide education policymaking. If states decide to add this responsibility to the schools, small, rural school districts will face major challenges not only in providing programs but also in managing complex transportation systems. Many local officials in rural areas are convinced that because of transportation problems the ability of schools to address this issue is severely limited. Programs that did provide after-school services would probably be available primarily to children who lived near the schools, usually in the small towns where schools are located. Children living on farms and others living in remote areas would suffer by comparison.

• *Changing parental and community attitudes toward schooling.*

If the dropout rate is to be significantly reduced, parental and community attitudes toward education will have to change dramatically, especially in core urban areas and small, rural communities. Economic incentives to dropping out of school will have to be reduced or eliminated. Parental and student attitudes about the efficacy of schooling and its relationship to economic opportunities will also have to change. Are making these changes primarily the responsibilities of the school system or does the state and community bear the major responsibility for changing attitudes and expectations?

In most states, the job of reducing the dropout rate has been placed squarely on the shoulders of local school officials. Local education leaders interviewed for this study believe, however, that schools alone cannot tackle the job of changing community and parental attitudes. They favor not only more financial and programmatic help from the state but also attention to the issues of economic incentives and parental expectations by state leaders. Some state policymakers have begun to consider measures that would reward students who complete their education and apply negative incentives on potential dropouts. One widely discussed approach would be to deny drivers' licenses to students who drop out of school, for example. West Virginia's legislature recently enacted such as prohibition as part of an ambitious reform program. Others have proposed statewide agreements among employers not to hire young people who are not in school.

State political leaders have exerted substantial efforts to link education and jobs in the public mind. Local educators, addressing stubbornly high dropout rates in many rural communities, are not sure that the message is reaching parents and student in many rural areas. If schools are assigned primary responsibility for reducing dropout rates, improving the literacy of the workforce and encouraging many more students to seek the higher education and technical training, they will have to have many more resources and much more substantial support from state, private sector and community leaders.

Once again, this issue raises the question of the role of the family in setting higher expectations for students. How do schools, states or communities affect the way in which parents communicate expectations about the education of their children? Schools in small, rural communities — especially those where the farm and natural resources economies are depressed — face difficult challenges in changing the perceptions and attitudes of families in their isolated areas. In order to reduce the dropout rates significantly in these communities, much more fundamental change will have to take place than can be expected from providing dropout counselors, remedial education program or even alternative schools to students who are "at risk" of dropping out.

• *Dealing with issues of personal behavior and health.*

Preventing drug abuse, teenage pregnancy, teenage suicide and AIDS are all goals of the society - goals to which schools are expected to make a major contribution. These issues concerning personal behavior and health are confronting state policymakers and local educators, even as they focus their attention on curriculum, teaching, test scores and paperwork. Small, rural

schools are not immune to any of these problems, although the current incidence of at least drug abuse and AIDS is probably more concentrated in urban areas than in small, rural communities.

Lacking other effective mechanisms to deal with these issues, policymakers will probably expand the use of the schools in fighting drug abuse, teen pregnancy, suicide, AIDS and other social ills. State and local officials will also have to face the limits of schooling and the competing claims for a better-educated workforce in determining the proper mix of traditional educational activities in schools and other types of education.

When state policymakers engage in the next round of education reforms, they will be more cognizant than ever before of the importance of recognizing the special attributes and problems of small, rural schools. Many of the recent proposals for reform implicitly recognize differences among schools by offering incentives, allowing some regulatory relief to schools that are improving, targeting aid to poorer schools, and encouraging more school-based management. Education reform in rural Appalachia has been stressful for some but most state and local officials believe that it represents a promising beginning.

FOOTNOTES

1. E. Robert Stephens, Walter G. Turner, Exerpts from unpublished monograph **"The Rural School Administrator: It Really Is Lonely at the Top,"** (College Park, Maryland: University of Maryland at College Park, Department of Education Policy, Planning and Administration).

2. Gerald Bass, **Financing Rural Education**, paper presented at the Rural Education Asso ciation National Conference, October 12, 1986 (Little Rock, Arkansas: Oklahoma State University).

3. *Ibid.*

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Appendix 1

METHODOLOGY OF THE STUDY

In approaching this study of the effects of statewide education reforms on small, rural schools in Appalachia, *State Rearch Associates* undertook four major tasks:

(1) Developing a matrix and description of key education reform legislation or regulations enacted and implemented between January, 1982 and June of 1988.

(2) Interviewing state officials concerning the impact of education reform on small, rural schools.

(3) Surveying local school districts.

(4) Interviewing selected local officials and others in small, rural school districts.

Developing a Matrix and Description of Key Education Reform Measures

National studies were reviewed and national organizations such as the Education Commission on the States, the National Governors' Association, the National Association of School Boards and the Council of Chief State School Officers were contacted to provide information for a draft matrix and description of education reform measures enacted and implemented in each of the ARC states between January of 1982 and June of 1988. At the same time, state contacts in each of the states were asked to provide descriptive information on education reforms in their states.

After the draft matrix and summary description of reforms were developed, each state's draft was sent to the state contact, who was asked to review the draft. These dedicated individuals made many improvements to the draft sections of the description and matrix. The final matrix and summaries of reforms can be found in Appendices 2 and 3.

Interviews with State Officials

Based on recommendations from ARC contacts and state education contacts, personal interviews were arranged in each of the 13 state capitols. *SRA* staff travelled to each capitol and interviewed from 3-6 state officials in each. An attempt was made to interview representatives of governors' officers, legislators, legislative staff members as well as state education department officials.

In order to gather full and frank information from the interviewees, *SRA* agreed not to attribute specific comments to specific individuals. Most of the interviews lasted approximately one

hour. A copy of the State Officials Interview Guide is included as Appendix 6. A complete list of persons interviewed in each state is included as Appendix 5. This list also includes local officials.

Survey of Local School Districts

Since the study focused on small, rural school districts, a group of 114 school districts from counties defined as "non-metro rural" or "non-metro small center" was identified by ARC. These counties are spread throughout the ARC region, and include from 1 county in South Carolina to 32 in Kentucky. In two states where no counties fit into these rural designations, the most rural counties were selected.

Questionnaires were sent to school superintendents in each of these 114 small, rural school districts. State contact persons were in touch with these districts to inform them that the questionnaires were being sent and to ask them to participate in the study. A second round of calls were made by the state contacts to districts which did not immediately respond. *SRA* then made telephone contact with 83 school districts that had not responded to the first wave of questionnaires. A second set of questionnaires were sent to these districts. In total, 47 school districts competed questionnaires, a 42 percent response rate. Given the burdens confronting school officials in small, rural districts, this response rate was considered by *SRA* to be more than adequate for the study.

Of the 47 responding, 17 were districts in "non-metro rural" counties and 30 were in "non-metro small centers." Districts responded from 10 states. Three districts in Maryland, New York and South Carolina that met the criteria for the survey did not respond.

Results of the questionnaire are tabulated in Appendix 4.

Interviews with Local Officials

Based in part on interviews of state officials and in part upon an analysis of the characteristics of the districts, *SRA* and ARC staff selected 10 small, rural school districts to be visited by *SRA*. During these visits, interviews were held with school officials, officials of the local taxing authority, teachers, principals and sometimes parents. As with state officials, local interviewees were assured that their comments would not be directly attributed to them. A list of local interviewees is included in Appendix 5.

Appendix 2

SUMMARY MATRIX OF EDUCATION REFORMS IMPLEMENTED JANUARY, 1982 - EARLY 1988

Alabama
Georgia
Kentucky
Maryland
Mississippi

New York
North Carolina
Ohio
Pennsylvania
South Carolina

Tennessee
Virginia
West Virginia

Appendix 2 - SUMMARY MATRIX OF EDUCATION REFORMS IMPLEMENTED 1982 - 1987

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	STATE:	Alabama	Georgia	Kentucky	Maryland	Mississippi	New York	N. Carolina	Ohio	Pennsylvania	S. Carolina	Tennessee	Virginia	W. Virginia
2	TYPE OF REFORM													
3														
4	I. Administration/Leadership													
5	A. Training for school board members	X	X	X										
6	B. Changes in certification for administrators			X		X			X	X				X
7	C. Competency testing for administrators	X	X			X		X						X
8	D. Evaluation programs for administrators		X		X	X	X			X	X	X	X	X
9	E. Establish. of adm. staff dev. progs	X	X	X		X	X	X	X	X	X	X	X	X
10	F. Technical assistance for schools		X	X					X	X	X			
11														
12														
13	II. School or District Accountability													
14	A. Academic bankruptcy		X	X							X			
15	B. School or district evaluation					X	X	X			X			
16	C. Changes in school governance					X					X		X	X
17	D. Consolidation	X	X				X				X	X		
18	E. Parental involvement in school policymaking										X			
19														
20														
21	III. Early Childhood													
22	A. Pre-kindergarten programs		X	X	X		X		X	X	X	X		
23	B. Mandatory kindergarten and/or full day kindergarten	X	X	X		X			X		X	X		
24	C. Special early childhood programs for handicapped or gifted		X	X						X	X			X
25	D. Other early intervention programs or activities			X	X			X		X	X			
26	E. Prime time programs - smaller classes for element. years			X		X		X	X			X		
27														
28														
29	IV. Students													
30	A. Changes in the curriculum	X	X	X		X	X	X	X	X	X	X	X	X
31	B. Increased requirements for high school graduation	X	X	X	X	X	X	X	X	X	X	X	X	X
32	C. Competency testing													
33	Minimum competency for graduation	X	X		X	X		X			X	X	X	
34	Other achievement or competency tests	X	X	X	X	X	X	X	X	X		X	X	
35	D. Changes in placement or promotion policies		X			X		X			X			
36	E. Changes in policies re extracurricular participation										X			X
37	F. Academic recognition programs	X	X	X				X	X	X				
38	G. Providing home instruction as an option				X									
39	H. Revised and/or expanded remedial programs	X	X	X	X			X	X	X	X	X	X	
40	I. Programs for at-risk youth	X	X	X	X	X	X	X	X	X	X	X	X	X
41	J. Increased homework requirements								X					

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Appendix 2 - SUMMARY MATRIX OF EDUCATION REFORMS IMPLEMENTED 1982 - 1987

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
43	TYPE OF REFORM													
44	V. Teachers													
45	A. Instructional time			X				X	X		X			
46	B. Certification changes	X	X	X	X	X	X	X	X	X		X	X	
47	C. Alternate certification requirements	X	X		X	X		X			X		X	X
48	D. Competency testing		X	X	X		X		X	X		X	X	X
49	E. Education and preservice training		X	X	X	X	X	X	X	X	X	X		X
50	F. Evaluation programs for teachers		X	X	X	X	X	X			X	X		X
51	G. Career ladder plans and merit pay plans		X	X				X	X		X	X		
52	H. Staff Development	X	X	X	X	X		X	X	X	X	X	X	X
53	I. Forgivable loans to attract new teachers	X	X	X		X	X	X	X	X	X	X		
54	J. Other programs to address the teacher shortage			X	X	X	X	X		X	X	X	X	X
55	K. Teacher recognition or awards			X						X	X	X		
56														
57														
58	VI. Special Needs													
59	A. Program enhancements in computers	X	X		X	X		X	X	X	X	X	X	
60	B. Program enhancements in communications and technology	X	X		X	X	X	X		X		X	X	
61	C. Programs for the gifted				X			X	X	X	X	X	X	X
62	D. Programs for the handicapped	X		X	X		X			X	X		X	X
63	E. Adult literacy		X	X							X			
64	F. Changes in length of school day and/or year & attendance				X	X		X			X	X	X	
65	G. Programs to lower class size			X									X	
66	H. Parental involvement	X	X			X	X		X	X		X	X	X
67	I. Disciplinary policies	X	X	X	X		X		X		X	X	X	
68	J. Guidance/counseling	X											X	
69	K. Facilities	X	X	X	X		X	X		X	X	X		
70														
71														
72	VII. Finance													
73	A. Tax increases required to implement reforms			X		X		X			X	X		
74	B. Funding innovations such as corporate donations or ed. partnerships	X		X	X	X				X	X			
75	C. Teacher/administrator salary increases	X	X	X		X	X	X	X		X	X	X	X
76	D. Incentive programs for schools or teachers		X	X		X	X			X	X	X	X	X

Appendix 3

STATE BY STATE SUMMARIES OF EDUCATION REFORMS ENACTED AND IMPLEMENTED BETWEEN JANUARY OF 1982 AND EARLY 1988

Alabama
Georgia
Kentucky
Maryland
Mississippi

New York
North Carolina
Ohio
Pennsylvania
South Carolina

Tennessee

Summary of Education Reforms Since January of 1982

STATE: Alabama

HISTORY: The State Education Department established a task force which issued *A Plan for Excellence: Alabama's Public Schools* in January of 1984. The State Board of Education approved 48 of the recommendations contained in the report. Legislative changes were made in kindergarten, teacher compensation, and computers and technology. The State Board of Education changes were made in student competency and graduation requirements, teacher education and teacher certification, and parental involvement. These and other changes were are still being phased in.

COST: In 1985, $15.9 million in additional funds was appropriated for education reforms; in 1986, $118.3 and in 1987, $107.0. The state's share of school revenues was 69.1% in '83 and rose to 71.9% in '86. State aid experienced a 35% growth over this same period. These data include payments on behalf of teacher retirement, social security and the Public School and College Authority.

REFORMS:

I. Administration/Leadership

* **Training for school board members:** The Education Reform Act of 1984 created 11 regional in-service centers. Local school board members were identified by the State Board of Education as an area of critical need, thus allowing in -service centers to supplement the training programs provided by the Alabama Association of School Boards. Each Center determines independently the allocation of support for training of school board members.

* **Changes in certification for administrators:**

* **Competency testing for administrators:** Any person who completed curriculum requirements for initial certification in an area of administration during or after Spring Semester/Quarter 1981 must pass the Administration and Supervision Test of the Alabama Initial Teacher Certification Testing Program. Persons seeking initial certification as a reading supervisor must pass a test specific to that discipline.

* **Evaluation programs for administrators:**

* **Establishment of administrative staff development programs:** The State Board of Education specified the "superintendency, the principalship, other admin-

istrative positions and supervisory positions" as areas of critical need with regard to the staff development activities to be provided by the 11 regional in-service centers created by the Education Reform Act of 1984. Each of the in-service centers has provided in-service education or staff development opportunities for administrators.

* **Technical assistance for schools:**

II. School or District Accountability

* **Academic bankruptcy:**

* **School or district evaluation:**

* **Changes in school governance:**

* **Consolidation:** In 1986, $10,288.917 was provided from a State Bond Issue as an incentive for local boards of education to consolidate small high schools. Six local boards of education received these funds which were based on need and the ability to provide matching funds.

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:**

* **Mandatory kindergarten and/or full day kindergarten:** A mandatory statewide kindergarten program was instituted in 1986.

* **Special early childhood programs for handicapped or gifted:**

* **Other early intervention programs or activities:**

* **Prime time programs - smaller classes for elementary years:**

IV. Students

* **Changes in the curriculum:** In 1985, funds were allocated for the development of College Board Advanced Placement classes. In 1988, 261 of the 399 high schools provide such classes.

* **Increased requirements for high school graduation:** Requirements for a Standard Diploma, effective for students who began the ninth grade during or after the 1985-1986 school year, were amended in 1987 to include the following: 4 units of English, 3 units of social science, 2 units each of mathematics and science, 1 unit of physical education, 1/2 unit of health education, 1/2 unit of home and personal management (not required of students beginning ninth grade in 1985, 1986 or 1987), 9 units of electives.

Requirements for an Advanced Diploma, effective for students who began the ninth grade during or after the 1985-1986 school year, were amended in 1987 to include the following: 4 units each of English and social science, 3 units each of mathematics and science, 2 units of a foreign language, 1 unit of physical education, 1/2 unit of health education, 1/2 unit of home and personal management (not required of students beginning ninth grade in 1985, 1986 or 1987), 4 electives.

In addition to specifying minimum units for each broad discipline, the State Board of Education required specific courses. For example, the 3 units of mathematics required for the Advanced Diploma must include 1 unit each of Geometry, Algebra II, and a mathematics elective.

* **Competency testing:** Beginning in 1984-1985 school year, all students are required to pass a basic skills test to receive a diploma. The test is first offered in the 11th grade. Deficiencies identified are the basis for remediation programs, adjustments in curricula and parent-teacher conferences. Basic competency tests are also taken by students in grades 3, 6, and 9.

* **Changes in placement or promotion policies:**

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:** Seventh grade students who qualify participate in the Southeastern Regional Talent Search, or Talent Identification Program, administered by Duke University.

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:** (Remedial programs have been available to all students who do not meet state performance standards since 1981.)

* **Programs for at-risk youth:** In 1985, a building-based staff support team program was implemented in six elementary schools to address the needs of teachers dealing with at-risk children. The program expanded to 21 schools in 1988, with further expansion planned. In 1986, the State Board of Education passed a resolution requiring the training of all school personnel in teenage suicide awareness and prevention. The first annual interagency conference on youth at-risk was held and the

"Be-Smart-Don't Start Just Say No" drug prevention program for all children grades K-6 was implemented.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:**

* **Certification changes:** As of 1987, persons seeking initial certification is a teaching field or instructional support area must pass a subject matter test. Undergraduates are no longer required to pass a general professional studies test.

* **Alternate certification requirements:** Effective in 1986, all prospective teacher seeking alternate certification must have a BA or a BS in the appropriate subject area, pass a certification test, complete an internship and complete a MA degree. Day-trade teachers who do not have college preparation, are required to pass an English language proficiency test and an occupational competency test prior to certification.

* **Competency testing:**

* **Education and preservice training:**

* **Evaluation programs for teachers:**

* **Career ladders and merit pay plans:**

* **Staff development:** Teachers in areas of critical need - mathematics, science, computer science, language arts/English, special education, economics - are eligible to participate in staff development activities sponsored by the 11 regional in-service centers.

* **Forgivable loans to attract new teachers:** The Emergency Secondary Education Scholarship program was designed to attract able students into the teaching profession in subjects of mathematics, science, computer education, and other critical areas and to encourage certified Alabama public school teachers to add to their certificates mathematics, science, computer education, and other fields which may later be designated as critical areas by the State Board of Education.

* **Other programs to address the teacher shortage:**

* **Teacher recognition or awards:**

VI. Special Needs

* **Program enhancements in computers:** In 1982, a program was initiated to provide technical assistance to local districts in planning for the acquisition and use of computers.

* **Program enhancements in communications and technology:** In 1984, a program was initiated to provide technical assistance to local districts in planning for the use of satellite television to enhance course offerings.

* **Programs for the gifted:**

* **Programs for the handicapped:** Policies were adopted in 1982 for competency testing for handicapped students.

* **Adult literacy:**

* **Changes in length of school day and/or year and attendance:**

* **Programs to lower class size:**

* **Parental involvement:** New requirements for parental involvement were adopted in 1984. Parent-teacher-student conferences are required to develop an education program plan for each student prior to the ninth grade. Additional activities include the involvement of parents of handicapped children through a statewide parent advisory council appointed by the State Superintendent of Education. The Council identifies parental needs which will serve as a planning guide for future activities.

* **Disciplinary policies:** The State Board of Education appointed a committee which developed alternatives to corporeal punishment, and procedures which could be followed if corporeal punishment is to be administered.

* **Guidance/counseling:** In 1984, the State Board of Education recognized Guidance and Counseling as an essential service in Alabama's public schools. The Guidance and Counseling State Plan for Excellence in Alabama's Public Schools was developed and disseminated to local education agencies in 1985. LEA's were required to submit local plans and annual evaluations to the State Department of Education.

In the Spring of 1985, an aptitude interest assessment program was implemented for students in grades eight and nine. The program has provided to businesses and industry valuable economic development information on a statewide and regional basis. The program is being expanded to include grades ten, eleven and twelve by the 1988-89 school year. The State Board of Education also adopted resolutions infusing Career Education (1984) and Character Education (1986) into the curriculum for grades K-12.

* **Facilities**: The state encourages the expanded use of school facilities through an active community education program. Through this program, training is provided for community education coordinators, extended day care/latch key programs are sponsored, district guidelines and models of successful community education programs are offered, and use of school facilities by other agencies is encouraged.

VII. Finance

* **Tax increases required to implement reforms:**

* **Funding innovations such as corporate donations or educational partnerships**: By December of 1987, 729 public schools and classes had been adopted by business, industry and other organizations participating in the Adopt-A-School program.

* **Teacher/administrator salary increases**: In 1986-1987, a five percent increase was provided all teachers and an additional ten percent increase was provided tenured teachers.

* **Incentive programs for schools or teachers:**

Summary of Education Reforms Since January of 1982

STATE: Georgia

HISTORY: In early March of 1985, Governor Joe Frank Harris' Education Review Commission led to the enactment of the Quality Basic Education Act (QBE) by a unanimous vote of the Georgia General Assembly. The Act became effective July 1, 1986. Legislative revisions were enacted in 1987, by Senate Bill 179, the QBE Reviser Bill. The primary goals of the act are:

1. A substantial reduction in the number of teachers who leave the teaching profession for reasons of job dissatisfaction;
2. A decrease in the percentage and number of students who enter school but drop out prior to graduation;
3. The elimination of emergency teaching certificates and waivers for teaching outside of speciality;
4. A decrease in the percentage of students who fail the State Basic Skills Test in the tenth grade;
5. A significant increase in the test scores of Georgia students who take the Scholastic Aptitude Test (SAT); and,
6. An increase in the number of students mastering each skill in reading, mathematics, and other subject areas.

COST: The cost of implementation of these reforms was approximately $102 million in '85, $265 million in '86 and $310 million in '87. While the growth in state aid over the period of 1983 to 1986 was 29%, the state's share of school revenues declined slightly over this period from 56.5% in '83 to 55.8% in '86.

REFORMS:

I. Administration/Leadership

* **Training for school board members:** Newly elected or appointed school board members will receive an orientation on the system of education in Georgia which will include study of school finance, school law, the QBE act and the evaluation of superintendents and boards.

* **Changes in certification for administrators:** (Revised criteria should be available by the Fall of 1988.)

* **Competency testing for administrators:** Candidates for a certificate in administration and supervision must have passed a test in this area. This test assesses the

administrator's knowledge in the areas of educational leadership, organizational and legal structure, management of personnel and school operations, instructional supervision, curriculum development, and social issues in school administration.

* **Evaluation programs for administrators:** All personnel employed by the public schools must be evaluated each year. When deficiencies are identified, a plan for eliminating them must be developed, and evidence of progress must be included in the next evaluation plan. This program was to be piloted in '87-'88 and implemented in '88-'89.

* **Establishment of administrative staff development programs:** Administrative staff are included in the school comprehensive staff development plan and are part of the career ladder program. Each local school system must develop and submit to the Board of Education an annual comprehensive staff development plan. The plan shall provide for programs to address deficiencies of school and system personnel identified through personnel evaluation, staff development needs identified through evaluation of the instructional program and other developmental needs deemed necessary by the local or state board.

* **Technical assistance for schools:** The school climate management program is designed to help school performance through better management techniques and more active participation in school operations by parents, teachers, students and the general public. State funding is limited to costs of providing technical assistance.

II. School or District Accountability

* **Academic bankruptcy:** State, regional and local boards are required to develop long term plans to improve education programs and services. Such plans will describe improvement needs, objectives for meeting the needs, resources to be directed toward them, a timetable and an evaluation design. Each public school and local system will be evaluated every five years. Schools will be compared to other schools with similar characteristics. Systems will be designated standard, exemplary or non-standard. All evaluation results will be made public. Non-standard schools must submit a corrective action plan to the state and the state board may increase the local share requirements for such schools to finance the corrections. If satisfactory progress is not made, the state board may file a civil action in the local superior court. If the court finds that local officials have impeded implementation of the corrective plan, it may appoint a trustee to operate the school system. This system was implemented in 1987.

* **School or district evaluation:**

* **Changes in school governance:**

* **Consolidation:** Local systems which consolidate with other local systems will not be required to finance any portion of state-approved construction or renovation costs necessitated by consolidation.

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:** Gifted children ages 0-4 may receive special services if local systems use local or federal funds. State funds may only be used at state schools and psycho-educational centers. These children are served under the handicapped program.

* **Mandatory kindergarten and/or full day kindergarten:** A full day kindergarten program which much include at least 4 1/2 hours of instruction per day for 180 days per year became effective in 1985.

* **Special early childhood programs for handicapped or gifted:** Preschool children (ages 0-4) who have severe handicapping conditions may receive special services - but local systems must use only local or federal funds. State funds may only be used at state schools and psycho-educational centers.

* **Other early intervention programs or activities:**

* **Prime time programs - smaller classes for elementary years:**

IV. Students

* **Changes in the curriculum:** The Board of Education must develop a statewide basic curriculum, including the competencies that all students must master before completion of high school. This core curriculum must be included in the curriculum in each local school.

* **Increased requirements for high school graduation:** The State Board of Education has set higher standards for graduation related to the new core curriculum. Minimum credits for graduation are 21 - 4 in English, 2 in math, 2 in science, 3 in social studies, 1 in physical education/health, 1 in computer technology and/or fine arts, and/or vocational education and/or junior ROTC.

* **Competency testing:** A comprehensive student assessment has been implemented which includes the use of nationally norm-referenced tests for grades two, four, seven and nine. State standardized tests are required for grades one, three, six, eight and ten. These tests will cover all major content areas but will emphasize

reading, writing and mathematics. Students will also be required to take a school readiness assessment during kindergarten and early in first grade. The state board is also developing a comprehensive test item bank to assess student achievement across all grade levels and subject areas and at various skill levels. It will be used to measure progress on the core curriculum and results will be used in school evaluations and advancement on the career ladder.

* **Changes in placement or promotion policies:** Scores on competency tests are used as criteria for promotion and graduation.

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:** Students receive a diploma which meets all established criteria plus an opportunity to receive a college preparatory seal of endorsement and/or a vocational seal of endorsement for respective diplomas.

* **Providing home instruction as an option:** (Allowable under pre-existing compulsory attendance law.)

* **Revised or expanded remedial programs:** A special instructional assistance program provides services to children in grades K - 5 who have been identified as having difficulty performing to expectations for their ages due to developmental lag. Persons receiving services under the handicapped or other remedial program described next are not eligible. A remedial education program is also available for students who are significantly behind in their achievement relative to their grade level. This program provides intense, individualized basic skills instruction designed to bring students up to grade level as quickly as possible. Persons eligible are those in grades 2 - 5 and grade 9 who score below the 25th percentile on a standardized reading and math test, or persons in grades 10 or 12 who score below the criterion score on the Basic Skills Test in reading, math or writing. A program is also available to help students whose native language is not English to develop fluency in English.

* **Programs for at-risk youth:** The state is piloting programs to develop a statewide effort in addressing at-risk youth.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:**

* **Certification changes:** Effective in 1986, an applicant for an initial renewable certificate must pass a test battery which assesses specific content knowledge and skills related to the certificate. The state board is authorized to require

applicants also to pass tests which assess broad general knowledge, oral and written communications skills and on the job performance. Conditions for certification also include satisfactory completion of a college course on human growth and development, a one-year supervised internship in the appropriate teaching field, passing the subject test, and the on the job assessment. All candidates for certification must have completed courses in the identification of children with special education needs and for grades K - 8 in health and physical education. Instructional aides must hold a high school diploma or a GED.

* **Alternate certification:** Alternative certification has been approved by the State Board in the critical fields of math, science, foreign language, and special education. The basic concept for alternative certification is to require that content requirements be met initially, and that provisions be made for meeting professional education requirements through staff development or college courses while on the job. Alternative certification for special education is an interim measure to be used only until the revised criteria are completed and accepted by the State Board of Education.

(During the summer of 1988, the Georgia Department of Education will sponsor an eight-week summer institute in which 30 teacher trainees will complete study and achieve competency in the areas of human growth and development, curriculum, teaching methodology, and identification and education of children with special learning needs. The teacher trainee will then complete a one-year supervised internship under the guidance of a mentor teacher with the support of the local school system. The institute candidates must hold a bachelor's degree in mathematics, science or foreign language and have at least a 2.5 overall grade point average. After passing the appropriate teacher certification test and satisfactorily completing the summer institute and year long internship, the teacher trainee will qualify for a teaching certificate.)

* **Competency testing:** Meeting minimum standards on a competency test is required for all practicing teachers.

* **Education and preservice training:** All non-standard teacher education programs were discontinued effective 1986.

* **Evaluation programs for teachers:** Teachers are included in the comprehensive staff development plan for the school. Performance must be evaluated annually. When deficiencies are identified, a plan for eliminating them must be developed, and evidence of progress must be included in the next evaluation plan.

* **Career ladders and merit pay plans:** The Board of Education has devised a career ladder program for all certified personnel to provide salary supplements for those who consistently demonstrate outstanding competency and performance. Such performance shall include the achievement of students beyond the level typically expected for their ability.

* **Staff development:** The Quality Basic Education Act requires local school systems to provide all public school officials and personnel the opportunity to continue their development throughout their professional careers. In FY88, professional development standards stipends were given to certified personnel who attended staff development activities which addressed their assessed need. The average stipend per recipient was $1,045 and the total number of certified personnel receiving professional development stipends was 20,408.

* **Forgivable loans to attract new teachers:** In 1983 - 1984, the General Assembly added mathematics and science as critical fields to the state-direct loan program. The original program had identified special education, industrial arts and agriculture as critical fields. These service-cancelable loans of $1500 per academic year were available for juniors and seniors accepted into approved teacher preparation programs in critical fields, liberal arts graduates working toward certification in the critical fields and certified teachers converting to critical fields. Other additions were middle grades with a concentration in mathematics and science (1984-85) and foreign languages (1985-86). Changes this past year included raising the loan amount to $2000 per academic year and providing state sponsored loans for people ineligible for state-direct loans due to income limits.

* **Other programs to address the teacher shortage:**

* **Teacher recognition/awards:**

VI. Special Needs

* **Program enhancements in computers:** Both the state and local boards must develop long-term electronic technology plans which describe their needs for effective use of technologies such as computers in improving their academic and administrative performance. The state will provide matching grants for implementation.

* **Program enhancements in communications and technology:** The state has set up a specialized education technology center.

* **Programs for the gifted:**

* **Programs for the handicapped:**

* **Adult literacy:** Recommendations of the Governor's Task Force on Adult Literacy resulted in adding $2 million to the budget and moving adult eduction programs from the Department of Education to a major office within the Post-secondary Education system.

* **Changes in length of school day and/or year and attendance:**

* **Programs to lower class size:**

* **Parental involvement:** The school climate management program is designed to help schools performance through better management techniques and more active participation in school operations by parents, teachers, students and the general public. State funding is limited to costs of providing technical assistance. This program will be implemented in '88. A pilot program of parent involvement was implemented in '87.

* **Disciplinary policies:** A in-school suspension program provides an alternative to suspension or expulsion for seriously and chronically disruptive students. Students may be placed in locations isolated from others students where they follow strict rules of behavior, continue their regular classroom assignments, and receive intense instruction designed to remediate deficiencies in basic academic skills.

* **Guidance/counseling:**

* **Facilities:** The reform legislation included incentives for consolidation of small schools to meet minimum recommended sized and grade organizations. Ninety four of the 186 school systems have now met the K-5, 6-8, 9-12 organizational recommendation; 40 school systems have consolidated smaller schools t meet minimum schools size recommendations. The Legislature appropriated $120 million in FY'87 and $178 million in FY'88 for the construction of new facilities and the renovation, modification and addition to existing facilities.

VII. Finance

* **Tax increases for reforms:**

* **Funding innovations such as corporate donations or educational partnerships:**

* **Teacher/administrator salary increases:** The minimum base salary for the bachelors degree with no experience must be comparable to the beginning salary of recent graduates of the University System of Georgia who are entering jobs with comparable entry requirements. This comparable salary will be multiplied by 10/12th to establish the minimum salary base for teachers. A 10% increase in teachers salaries and a 17% increase in administrators salaries resulted from the implementation of the QBE.

Summary of Education Reforms Since January of 1982

STATE: Kentucky

HISTORY: In April of 1982, the State Board of Education approved a limited set of reforms in the areas of school finance, vocational education, accreditation, extended employment for teachers, and competency testing and assessment for teacher certification. In 1985 and 1986, a broader and more far reaching set of reforms related to finance reform, at-risk children, academic bankruptcy and teacher evaluation and training, and the handicapped were implemented.

COST: The state share of school revenues decreased from 70.1% in 1983 to 68.6% in 1986. At the same time there was a 19% growth in state aid. In 1985, an additional $1.1 million was appropriated for education reforms; $26 million in 1986 and $87.5 million in 1987.

REFORMS:

I. Administration/Leadership

* **Training for school board members:** Candidates for local school boards must have high school diplomas or their equivalent and undergo at least 15 hours of training.

* **Changes in certification for administrators:** A principal testing program was implemented linked to the principal internship program.

* **Competency testing for all administrators:**

* **Evaluation programs for administrators:**

* **Establishment of administrative staff development programs:** In 1985, an assessment center for principals was established. Administrative staff recognition programs were put in place in '84. A principal internship program was also initiated.

* **Technical assistance for schools:** During school year 1982-83, 10 school districts received assistance to improve leadership, instructional planning and time management. These were the schools which ranked among the lowest in average student achievement. In school year 1983-84, eleven additional districts received assistance.

II. School or District Accountability

* **Academic bankruptcy:** The Department of Education is authorized by the state legislature to intervene in local school districts which fail to achieve minimum levels of academic accomplishment after receiving technical assistance from the state and implementing improvement plans. Schools making greater progress than expected are recognized. This program was implemented in 1985.

* **School or district evaluation:**

* **Changes in school governance:**

* **Consolidation:**

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:** A pre-school program was implemented for at-risk children.

* **Mandatory kindergarten and/or full day kindergarten:** In 1986, state legislation required kindergarten as a prerequisite to entering first grade. Additional funds were provided for kindergarten transportation. In addition, one teacher aide was provided for every kindergarten teacher.

* **Special early childhood programs for handicapped or gifted:** Since 1984, 15 - 20 pre-kindergarten programs for handicapped children have been in operation.

* **Other early intervention programs or activities:** Increased levels of remediation are provided for grades 1-3.

* **Prime time programs - smaller classes for elementary years:** Class sizes were reduced for grades 1-3 from 27 to 25.

IV. Students

* **Changes in the curriculum:** The State Board of Education adopted in October of 1983, minimum basic skills for Kentucky schools as a condition of state accreditation. The policy stipulates minimum skills by grade and subject in mathematics, reading, reference skills, spelling and writing. An intensive writing program was implemented for grades 7-10.

* **Increased requirements for high school graduation:** Graduation requirements were increased to 20 units for freshmen entering in the Fall of 1983. These requirements include 4 years of English, 3 of mathematics, 2 of science, 2 of social studies and 1 of phys.ed./health. Students are further required to take two years each of mathematics, English and science by the end of grade 10.

* **Competency testing:** Achievement test results must be published annually pursuant to legislation enacted in 1984. A new test has been developed for basic skills.

* **Changes in placement or promotion policies:**

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:** Privately sponsored awards in the form of plaques and flags are provided to outstanding students. Students also compete for the Governor's Cup - an academic recognition award.

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:** A program of remediation for those students who do not meet performance standards on competency tests was phased in from 1981 - 1985.

* **Programs for at-risk youth:** In 1984, a drop-out prevention program was initiated.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:** Several legislatively mandated programs were rescinded and the practice of snow-banking days was discontinued to make more time available for basics.

* **Certification changes:** In 1984, the Legislature established competency testing and a one year internship requirement for certification of new teachers.

* **Alternate certification requirements:**

* **Competency testing:** The competency test was expanded to include general education skills such as math, science, social studies, English and the major subject area of teaching.

* **Education and preservice training:** New teacher preparation approval standards have been approved as have increased entrance and exit requirements. Minimum competency in basic literacy skills (reading, writing, comprehensive skills, oral and written communication) must be demonstrated prior to graduation from a teacher training institution.

* **Evaluation programs for teachers:** In 1986, the evaluation of teachers was linked to demonstration of certain competencies. The state provides training and certification of evaluators. A state monitoring system has been established to review local evaluation efforts.

* **Career ladders and merit pay plans:** A pilot career ladder plan was adopted in 12 districts in 1986 for teachers and school administrators.

* **Staff development:** Week long training institutes are provided for teachers; teacher in-service programs have been strengthened.

* **Forgivable loans to attract new teachers:** The state administers a loan program to encourage more education students to become certified or recertified in math and science. Recipients are forgiven a year of the loan for each year that they teach math or science within Kentucky.

* **Other programs to address the teacher shortage:** Kentucky provides scholarships, effective 1986, for top students to enter teaching, particularly in math and science.

* **Teacher recognition/awards:** A $300 bonus is provided for each non-administrative certified person with a satisfactory evaluation.

VI. Special Needs

* **Program enhancements in computers:**

* **Program enhancements in computers technology:**

* **Programs for the gifted:** State funds for the gifted and talented more than doubled in the school year 1981 - 1982, expanding these programs to every school district. In 1983, a Governor's Scholars Program was initiated for students to study science, technology and Kentucky's future. Additional classroom units have been provided for exceptional students.

* **Programs for the handicapped:** Increased funding was made available to hire additional special education teachers for local school districts.

* **Adult literacy**: In 1985 the PACE program was begun to teach basic skills to adults with low levels of literacy skills who have preschool children. The program was designed in part to help teach adults to read to their children.

* **Changes in length of school day and/or year and attendance:**

* **Programs to lower class size:** Class size has been capped at 29 students for grades 1-3 and 31 students for grades 4-12.

* **Parental involvement:**

* **Disciplinary policies:** A 1984 law requires persons between the ages of 16 and 18 to have written, signed parental permission, witnessed by the principal, to withdraw from school.

* **Guidance/counseling:**

* **Facilities:** Over $200 million has been appropriated in each of the last two years for facilities construction.

VII. Finance

* **Tax increases required to implement reforms:** Legislation enacted in 1984 requires local districts to levy a maximum ad valorem tax of 15 cents, or the rate supported by the district power equalization ratio, whichever is greater, in order to qualify for aid under a new power equalization funding formula. Legislation was also adopted to give local districts more tax raising options by permitting districts to levy either or all of a utility gross receipts tax, an excise tax on income and an occupational license tax.

* **Funding innovations such as corporate donations or educational partnerships:** Technical assistance is made available through state staff to help local districts cultivate business-school partnerships.

* **Teacher/administrator salary increases:** Salary increases are provided for teacher longevity.

* **Incentive programs for schools and teachers:** Grants are provided to local school districts for programs designed to improve student academic performance. These grants must be matched by private funds. Grants are also provided to teachers or school districts for the development and implementation of successful instructional programs.

Summary of Education Reforms Since January of 1982

STATE: Maryland

HISTORY: In 1983, the Governor appointed a commission to study school finance, in particular to consider increasing state funds for education and equalizing funding to districts. Subsequent legislation significantly increased state funds for education, providing $616 million in new funds over a five year period. Implementation of a second set of major reforms began in 1985. Many were related to teacher recruitment, education and certification and assessment of principals.

COST: In 1985, the state appropriated an additional $55.2 million to finance reforms. In 1986, the amount was $103.5 million and in 1987 the amount was $168 million. While growth in state aid was 22% over the period of '83-'86, the state share of school revenues rose only from 40.2% to 40.4%.

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:**

* **Competency testing for all administrators:**

* **Evaluation programs for administrators:** An assessment center for prospective principals was established in 1985.

* **Establishment of administrative staff development programs:**

* **Technical assistance for schools:**

II. School or District Accountability

* **Academic bankruptcy:**

* **School or district evaluation:**

* **Changes in school governance:**

* **Consolidation:**

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:** There are 56 pre-kindergarten programs operating in 12 local education agencies in the state.

* **Mandatory kindergarten and/or full day kindergarten:**

* **Special early childhood programs for handicapped or gifted:**

* **Other early intervention programs or activities:** Several pilot programs are in operation in Baltimore City, under the auspices of the Early Learning Support Center.

* **Prime time programs - smaller classes for elementary years:**

IV. Students

* **Changes in the curriculum:** (The State Department of Education is developing curriculum frameworks in social studies, fine arts, math, science and English and languages. Minimum standards within these areas are being increased.)

* **Increased requirements for high school graduation:** New graduation requirements have been adopted by the Board of Education which change the distribution of requirements for graduation. The total number of required units for graduation is 20; the number of electives has been decreased and math and science requirements have been increased. These requirements are effective for the class of 1989.

* **Competency testing:** Since the Fall of 1983, students entering the 9th grade are required to pass a functional test in the basic skills of reading and mathematics. For those graduating in 1988, a citizenship test is also required. Students are required to pass a competency test in order to receive their diplomas.

* **Changes in placement or promotion policies:**

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:**

* **Providing home instruction as an option:** In 1987, the legislature enacted a provision permitting home instruction under limited circumstances.

* **Revised and/or expanded remedial programs:** Remedial assistance is provided to all students not passing the competency exams.

* **Programs for at-risk youth:** The state is now funding several pilot programs in the areas of dropout prevention, teen pregnancy and aids prevention. The dropout programs provide a guarantee of work or advanced education for those who participate in the program.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:**

* **Certification changes:** Performance criteria were established as prerequisites for certification, effective in 1987. All teachers must score at at least the 90% level on the National Teacher Exam.

* **Alternate certification requirements:** A program to recruit non-traditional candidates was implemented in 1986. Candidates for elementary and secondary teachers who wish to receive alternate certification must have a BA, pass a certification test, complete an internship and undergo additional training as specified by the state. Another model also in use is offers a one-year intensive study program at the College Park Campus of the University of Maryland.

* **Competency testing:** All teachers must score at at least the 90% level on the National Teacher Exam.

* **Education and preservice training:** Student assessment data is used in higher education to improve programs, teaching and learning and hold institutions accountable. The details of how this data is used are left up to the individual campuses. New approval standards for teacher education were adopted in 1986.

* **Evaluation programs for teachers:** The state developed a set of criteria to evaluate teaching performance. As a classroom evaluation instrument, it is available to local districts for evaluation and staff development purposes.

* **Career ladders and merit pay plans:**

* **Staff development:** The state in cooperation with local districts is providing teacher in-service training projects to improve instructional strategies, including mastery learning, student team teaching, teaching variables, active teaching, and increasing academic learning time.

* **Forgivable loans to attract new teachers:**

* **Other programs to address the teacher shortage:** A teacher recruitment specialist was employed in 1986. In 1984, the Legislature enacted a scholarship program for teachers in areas of critical need - math, science and special education.

* **Teacher recognition or awards:**

VI. Special Needs

* **Program enhancements in computers:** In cooperation with IBM, the state has developed in five local school districts the Maryland Education Technology Network.

* **Program enhancements in communications and technology:** Local technology plans are required and have been implemented in the schools. State staff specialists provide training in the use of instructional television.

* **Programs for the gifted:** The State supports 1 and 2 week summer institutes for gifted students in grades 5-12 at college and university campuses, science museums, and other institutions.

* **Programs for the handicapped:** A special program with Apple Computer, funded by the Christina Foundation, is providing special computer-based assistance for handicapped students.

* **Adult literacy:**

* **Changes in length of school day and/or year and attendance:** The state increased the number of required hours of instruction and the number of required periods in a day, thereby lengthening in some cases the school day.

* **Programs to lower class size:**

* **Parental involvement:**

* **Disciplinary policies:** A pilot project is operating in four of the state's 24 school districts to use guidance services to address the problem of disruptive youth.

* **Guidance/counseling:**

* **Facilities:** As a result of the recommendations of the Task Force on School Construction, an additional $15 million will be available for facilities construction and renovation in FY '88.

VII. Finance

* **Tax increases required to implement reforms:**

* **Funding innovations such as corporate donations or educational partnerships:** A foundation in Baltimore has provided small stipends for students who participate in community service activities. ABC has sponsored the Read America/ Win America Student Literacy Corps.

* **Teacher/administrator salary increases:**

* **Incentive programs for schools or teachers:**

Summary of Education Reforms Since January of 1982

STATE: Mississippi

HISTORY: In December of 1982, the Mississippi Legislature, in a special session called by Governor William Winter, passed an Education Reform Act that was the first comprehensive statewide education reform legislation enacted in the country. The law set forth new procedures for school accreditation, teacher certification personnel appraisal, staff improvement, and teacher education. It required kindergarten programs, teacher assistants in early grades, and minimum student and teacher competencies. Its goals were to: improve the capacity for state-level educational leadership; improve student achievement; increase the competence of teachers and administrators; reward demonstrated competence; and increase accountability for everyone involved in public education. The overriding purpose of the reforms was to make Mississippi competitive with other states.

COST: In 1984, Mississippi appropriated an additional $12.3 million for education reforms. In 1985, '86 and '87, additional state dollars appropriated for education reform totaled $24.4 million, $41.1 million and $74.6 million respectively. The state's share of school revenues increased from 55.3% to 57.2% from 1983 to 1986. State aid grew 24% over this same period.

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:** Competency based certification was required in 1986.

* **Competency testing for all administrators:** A new competency testing and assessment instrument was introduced in 1986.

* **Evaluation programs for administrators:** A personnel appraisal system was instituted for all local school personnel in the 1986-87 school year. This was a performance based evaluation and compensation system. Due to controversy surrounding the use of a state system, local districts now have the option of using the state system or using their own locally developed system if it meets certain stipulations established by the State Board of Education.

* **Establishment of administrative staff development programs:** Local school districts are required to provide in-service training and staff development activities. The Education Reform Act includes an optional professional development program for teachers and administrators. Individuals taking part in the program, including evaluations, are entitled to increments beyond the regular salary schedule. The program was implemented in the 1985-86 school year. The state has also established a School Executive Management Institute which serves all of the state's principals and other management personnel. The state has established an assessment center where an individual who wishes to be considered for principalship undergoes a rigorous two day assessment.

* **Technical assistance for schools:**

II. School or District Accountability

* **Academic bankruptcy:**

* **School or district evaluation:** A program of accountability/instructional management has been adopted as a basis for accountability and as a standard for accreditation of schools. The program defines methods of instruction and evaluation and will provide the framework to implement the performance standards required by the reform package.

* **Changes in school governance:** The Education Reform Act required the re-organization of the State Department of Education.

* **Consolidation:**

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:**

* **Mandatory kindergarten and/or full day kindergarten:** July of 1983 through June of 1986, local districts could operate kindergarten programs on a voluntary basis. Beginning with the 1986-87 school year, all districts must operate kindergarten programs. All districts but one operate full day programs. In the 1986-87 school year, teacher assistants were made available to the kindergarten programs.

* **Special early childhood programs for handicapped or gifted:**

* **Other early intervention programs or activities:**

* **Prime time programs - smaller classes for elementary years:** A program for grades one through three was implemented where teacher assistants are provided to the classrooms to help improve students ability to read. The program was phased in with grades one in the 1983-84 school year, grade 2 in the 1984-85 school year and all three grades in the 1985-86 school year. In 1986-87, the program was extended to kindergarten.

IV. Students

* **Changes in the curriculum:** Summer institutes offer academic enrichment programs for high school students at two state universities. High school juniors are offered a balanced enrichment program in all curriculum areas at the Governor's School at the Mississippi University for Women.

* **Increased requirements for high school graduation:** Beginning in the 1984-85 school year, each district school board was required to establish standards for graduation from its schools which included minimum standards set forth in the Education Reform Act of 1982. State minimum standards include 4 units of English, 2 of math, 2 of science, 2 of social studies, with a total minimum credit requirement for graduation of 18.

* **Competency testing:** Minimum competency testing is required for grades three, five, eight and eleven. A functional literacy exam is also required for 11th grade students. The state board is required to monitor the results of the assessments and if the composite student performance of a school or basic program falls below the minimum standards, technical assistance must be provided by the state for corrective action. Students are required to pass a competency test for graduation.

* **Changes in placement or promotion policies:** Students are required to demonstrate mastery of one level of course work before being promoted to the next level. Students are required to pass a competency test for graduation.

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:**

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:**

* **Programs for at-risk youth:** During the 1986-87 school year, the Department of Ed. conducted pilot dropout prevention programs in 16 local school districts. In 1987-88, four more have been added.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:**

* **Certification changes:** Effective in 1983, every new teacher must take the National Teacher Examination. To qualify for probationary status, an individual must score above the 25th percentile on the exam. After a two year probational period, the teacher is evaluated by a team of three teachers. The evaluation is performance based rather than credential based.

* **Alternate certification:** A program was implemented in the 1986-87 school year wherein one hundred forty persons qualified for certification by entering the profession through a procedure whereby they must score at the 51st percentile or higher on the National Teachers Exam. Another 335 persons who already were in the profession were able to add other areas of certification through this procedure. All persons requesting alternate certification must have a BA, score in the 51st percentile or above on the NTE, complete an internship and complete a MA.

* **Competency testing:**

* **Education and preservice training:** Effective 1984, assessment is required for accreditation.

* **Evaluation programs for teachers:** Local school districts are required to provide in-service training and staff development activities. A personnel appraisal system was instituted for all local school personnel in the 1986-87 school year. This system is linked to compensation. Due to controversy surrounding the use of a state system, local districts now have the option of using the state system or using their own locally developed system if it meets certain stipulations established by the State Board of Education.

* **Career ladders and merit pay plans:**

* **Staff development:** The Act includes an optional, state funded professional development program for teachers and administrators. Individuals taking part in the program, including evaluations, are entitled to increments beyond the regular salary schedule. The program was implemented in the 1985-86 school year.

* **Forgivable loans to attract new teachers:** Two loan programs have been established to remedy teacher shortages in the state. Teachers certified in other fields may apply for loans of up to $1,000 a year for three years to retrain in mathematics and science. Teachers who accept loans must promise to teach at least one semester

in high school for each semester they receive a loan. In addition, a loan program designed to attract college students to mathematics and science teaching provides college juniors and seniors with up to $3,000 in forgivable loans per year, if they agree to teach one year in the state for each year they receive the loan. The State Department of Education designates five critical shortage areas which qualify for these loans.

* **Other programs to address the teacher shortage:** A scholarship program to train new teachers was implemented in 1983.

* **Teacher recognition/awards:**

VI. Special Needs

* **Program enhancements in computers:** Technical assistance has been provided to schools in computer use and technology since 1982.

* **Program enhancements in communications and technology:** A distance learning program using telecommunications and two way video techniques was initiated in 1987.

* **Programs for the gifted:** (A residential math and science school for juniors and seniors begins in school year 1988-89.)

* **Programs for the handicapped:**

* **Adult literacy:**

* **Changes in length of school day and year and attendance:** In 1982, Mississippi adopted a compulsory school attendance law which will be phased in through 1989. In 1983-84, school attendance was required for ages 6 and 7. In the 1987 legislative session, the compulsory school attendance age was raised to 16 which will be reached by school year 1989-90. Fines are imposed on parents who do not comply with the compulsory school attendance law.

* **Programs to lower class size:**

* **Parental involvement:** Parental involvement is required for school accreditation.

* **Disciplinary policies:**

* **Guidance/counseling:**

* **Facilities:**

VII. Finance

* **Tax increases for reforms:** Increased the state income tax and increased the severance tax on gas and oil and other sales and excise taxes to finance the reforms.

* **Funding innovations, especially incentive programs:** All early childhood education components of the Act (kindergartens and teacher assistants) will be financed out out a state grant in aid program.

* **Teacher/administrator salary increases:** The Education Reform Act states an intention to reach the average teaching salary among the Southeastern states. In 1983, the legislature appropriated $40. million to raise all teacher salaries by $1,000. They were raised by another $2,400 in 1985, $1,000 in 1986, and $1,000 in 1987.

* **Incentive programs for schools and teachers:** The Act includes an optional, state funded professional development program for teachers and administrators. Individuals taking part in the program, including evaluations, are entitled to increments beyond the regular salary schedule. The program was implemented in the 1985-86 school year.

Summary of Education Reforms Since January of 1982

STATE: New York

HISTORY: In March of 1984, the Board of Regents adopted an extensive "Action Plan to Improve Elementary and Secondary Education in New York". This plan restates the goals of the Board for students in elementary and secondary schools. Reforms were concentrated on increased high school graduation requirements, curriculum enhancements, programs for at-risk students, teacher certification and programs to attract new teachers.

COST: In 1984, New York appropriated an additional $76.8 million to finance education reforms. This amount increased over the next three years to $119.7 million in '85, $191.3 million in '86 and $293.6 million in '87. The state's share of school revenues increased from 41.7% in 1983 to 43.4% in 1986. During that same period, the state experienced a 28% growth in state aid.

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:**

* **Competency testing for all administrators:**

* **Evaluation programs for administrators:** An annual evaluation for administrators was required beginning in 1985. This was required as part of the Comprehensive Assessment Report implemented to improve school accountability.

* **Establishment of administrative staff development programs:** Regional principal's academies were initiated in 1986.

* **Technical assistance for schools:**

II. School or District Accountability

* **Academic bankruptcy:**

* **School or district evaluation:** All public school districts and non-public schools are required to prepare an annual Comprehensive Assessment Report on all

subjects and make it widely available to the public. The first report was due in the Fall of 1985. The assessments were made on student progress in all state testing programs. The state requires that the data be presented in a format emphasizing course objectives, test performance trends, and student progress. Schools are responsible for taking corrective action if the trends are not satisfactory.

The State Education Department identifies approximately 10 to 15 percent of low performing schools (600 - 900 schools) for special assistance. For low performing schools, a self-improvement plan is required. If sufficient progress has not been made in correcting the deficiencies identified by the CAR, the Department requires corrective measures targeted at the specific deficiency. Corrective measures may include required use of state syllabi, time on task for certain subjects, state-approved approaches to remedial work, comprehensive planning and the use of the state-supported in-service education days to address deficiencies identified by the CAR. The schools are assisted through the Department's Resource Allocation Plan program and consortia services.

In addition, through the high school registration program, every five years the Department monitors the progress of all schools in correcting deficiencies identified in the CAR. The CAR is also used to determine whether student performance indicates discrimination or inequity related to race, color, national origin or sex. The Action Plan requires school districts with attendance rates of 90 percent or less to develop plans for improving school attendance and improving retention rates.

* **Changes in school governance:**

* **Consolidation:** Significant legislative financial incentives have been provided to school districts which reorganize. Up to 30% additional aid is provided for facilities and an additional 30% is provided on top for ten years. As a result, 20 to 30 school districts have consolidated in the past 3 to 4 years.

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:** State aid is paid to local districts to allow them to conduct pre-kindergarten classes for all four-year-olds who wish to attend.

* **Mandatory kindergarten and/or full day kindergarten:**

* **Special early childhood programs for handicapped or gifted:**

* **Other early intervention programs or activities:**

* **Prime time programs - smaller classes for elementary years:**

IV. Students

* **Changes in the curriculum:** In social studies a new curriculum is in place which emphasizes student understanding of the political, geographic, economic, and multi-cultural aspects of the material. In mathematics, a new curriculum for kindergarten through sixth grade focuses on reasoning skills and logical processes and includes application of mathematical reasoning to other disciplines and computer technology. All students are required to learn the skills necessary to use computers for problem-solving. In science, a hands on approach to learning was emphasized with opportunities for experimentation and individual problem solving. The curriculum stresses logical thinking and reasoning skills. In addition to these specific requirements, students from grades 3 - 12 are encouraged to complete at least one interdisciplinary project each year to demonstrate their ability to apply the skills they have learned from several subjects in a long-term project.

* **Increased requirements for high school graduation:** Beginning in 1989, graduating seniors seeking a regular diploma will need 18 1/2 credits including 4 years of English, 2 each of mathematics and science, and 4 of social studies. Previous requirements were for 16 credits. For a Regents' diploma, students will need 18 1/2 credits, tested through "Regents' Examinations", including the same requirements as those for a regular diploma plus 3 years in foreign languages.

* **Competency testing:** Science and social studies have been added to the proficiency exams that students are required to take.

* **Changes in placement or promotion policies:**

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:**

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:**

* **Programs for at-risk youth:** To reduce the drop-out rate and improve job opportunities for high school students, a school-to-work program was initiated for 16-17 year olds from poor families. Jobs go to students who stay in school and meet certain attendance and performance standards. Additional funds have been appropriated to improve attendance in selected schools with high drop-out rates.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:**

* **Certification changes:** Beginning in September of 1984, a statewide certification examination has been required for teacher certification. The examination tests candidates not only on knowledge of teaching, but also on knowledge of English, social studies, mathematics, science and the arts. High school teachers will also have to pass speciality tests in areas they expect to teach in the future when the exams are available.

* **Alternate certification requirements:**

* **Competency testing:** An entrance exam is required for certification.

* **Education and preservice training:** All new teachers must have a 1 year internship.

* **Evaluation programs for teachers:** Annual evaluations of all teachers and administrators is required as part of the Comprehensive Assessment Report.

* **Career ladders and merit pay plans:**

* **Staff development:**

* **Forgivable loans to attract new teachers:** Forgivable loans of up to $4,000 per year are offered.

* **Other programs to address the teacher shortage:** The Governor developed a State "Teacher Corps" to attract talented people into teaching. The program, begun in 1984, offers college scholarships and graduate fellowships for students who want to teach in the areas of math, science, occupational education and second language. A minority opportunity program was initiated in 1987.

* **Teacher recognition or awards:**

VI. Special Needs

* **Program enhancements in computers:**

* **Program enhancements in communications and technology:** A distance learning program using telecommunications and two way video technology was begun in 1984. New curricula requirements require that students be able to use

computers to solve problems. For grades 7 and 8, one credit unit of a technology course is required.

* **Programs for the gifted:**

* **Programs for the handicapped**: Previously, schools districts or non-public schools had been permitted to award certificates only to students with substantially limited mental capacity if they had completed an appropriate individualized education program. The Regents expanded the number of handicapped students who are eligible to receive a certificate; that is, handicapped students who have attended school for 13 years (excluding kindergarten) and who have met the performance levels in the individualized education program can now receive a certificate. Schools are required to establish procedures to ensure that handicapped students have the opportunity to pursue a high school diploma and that receipt of a certificate does not prevent them from receiving a free public education up to age 21.

* **Adult literacy:**

* **Changes in length of school day and/or year and attendance:**

* **Programs to lower class size:**

* **Parental involvement:** A parent education center was established in conjunction with preschool education.

* **Disciplinary policies:** School districts are required to provide discipline codes and student bills of rights and responsibilities.

* **Guidance/counseling:**

* **Facilities:** A statewide inventory of the condition of school facilities was conducted in 1987.

VII. Finance

* **Tax increases required to implement reforms:**

* **Funding innovations such as corporate donations or educational partnerships:**

* **Teacher/administrator salary increases:** Starting salaries for teachers were increased.

* **Incentive programs for schools or teachers:** Mentor Teacher Demonstration Grants are available to experienced teachers who provide on-the-job training for beginning teachers.

Summary of Education Reforms Since January of 1982

STATE: North Carolina

HISTORY: In 1985, the North Carolina Legislature enacted the Basic Education Program, designed to provide each student in North Carolina public schools a basic level of instructional programs and services, regardless of geographic location or local economic factors. The program was designed to reduce funding inequities across the state. The program includes a core curriculum and set of competencies by grade level, intensive remedial programs, a state accreditation program linked to the requirements of the Basic Education Program, annual statewide testing in basic subjects, continuous evaluation of teacher performance, Career Ladder Pilots and performance standards for schools.

COST: The state's share of school revenues increased from 61.0% in 1983 to 64.2% in 1986. Over this same period, state aid to local schools grew by 45%.

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:**

* **Competency testing for administrators:** Competency-based certification requirements were implemented for principals and administrators in 1983.

* **Evaluation programs for administrators:**

* **Establishment of administrative staff development programs:** The North Carolina Assessment Center for Principals was developed in 1985. A pilot career development compensation plan was begun in 1986.

* **Technical assistance for schools:**

II. School or District Accountability

* **Academic bankruptcy:**

* **School or district evaluation:** The statute requires the State Board of Education to use accreditation as a means of insuring compliance with the Basic Education Plan. The accreditation process will become mandatory bu 1993.

* **Changes in school governance:**

* **Consolidation:**

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:**

* **Mandatory kindergarten and/or full day kindergarten:**

* **Special early childhood programs for the gifted or handicapped:**

* **Other early intervention programs or activities:** In 1986, the Legislature appropriated $287,000 for 15 pilot preschool screening/evaluation projects. The purpose of these projects is to gather information on key components of a good preschool screening program, identify the types of costs associated with the programs, the amount of funds needed and the educational outcomes that result from the screening and evaluations that are conducted. Schools are required to identify high risk students from K-12, with special emphasis on K-3. The state supports summer remediation programs for students who do not meet state standards of academic performance.

* **Prime time programs - smaller classes for elementary years:** Funds have been allocated to lower class size in grades K-3 to 23 students per teacher.

VI. Students

* **Changes in the curriculum:** The Department of Public Instruction recently revised the North Carolina Standard Course of Study and developed the Teacher Handbook for a competency-based curriculum. The arts, communications skills, library, media and computer skills, second language studies, and vocational education are disciplines included in the Basic Education Program's mandated core of knowledge. Children who have difficulty meeting the standards set in the BEP will receive extra help under the plan. Second language studies have been expanded to more grade levels and all subject areas are closely linked with an emphasis on thinking and reasoning skills.

* **Increased requirements for high school graduation:** The State Basic Education Program requires 20 units of credit in grades 9 through 12 in order to graduate from high school. Two additional units, to be determined by the local district, became effective in 1986-87. Students are required to have 4 units of English, 2 of math, 2 of science, 2 of social studies, and 1 of phys. ed.

* **Competency testing:** In 1985, the State Board of Education began requiring that students score above the 25th percentile in the achievement and competency tests administered in grades 1,2,3,6, 8 in order to be promoted from grades 3,6 and 8. Students are required to pass a competency test in order to graduate.

* **Changes in placement or promotion policies:** In 1985, the State Board of Education began requiring that students score above the 25th percentile in the achievement and competency tests administered in grades 1,2,3,6, 8 in order to be promoted from grades 3,6 and 8. Those students not scoring at the required level take a second test and if they do not score 75%, they must attend state-supported summer school in order to be considered for promotion.

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:** The North Carolina Board of Education approved the North Carolina Scholars Program in 1983. The program is designed to recognize high school students who complete a rigorous, well balanced curriculum and maintain, as a minimum, an overall grade average of "B" or its equivalent. Students receive a seal affixed to their diploma.

* **Providing home instruction as an option:**

* **Revised or expanded remedial programs:** Schools are required to identify high risk students from K-12, with special emphasis on K-3. The state supports summer remediation programs for students who do not meet state standards of academic performance.

* **Programs for at-risk youth:** The Alcohol and Drug Defense Program, begun in 1985-86, provided prevention and intervention services to over 1,500 people and trained over 4,000 more. Two hundred and fifty thousand dollars were appropriated and granted to 35 school systems. Over 14.7 million in state funds was made available in 1985-86 for drop-out prevention programs.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:** The Basic Education Program, to be phased in over an 8 year period starting in 1984, stipulates a required minimum of 5.5 hours of instructional time per day per student. This provision was amended in 1985 to cover K - 8. Full implementation awaits the hiring of additional teachers.

* **Certification changes:** In 1985, the state adopted the Initial Certification Program. Under this plan, local school systems provide special support to each individual's professional growth during the first two years of employment in education. The support team counsels new educators and periodically assesses them to insure satisfactory professional growth. At the end of two years, the support team makes a recommendation to the state regarding permanent certification. The score with which a prospective teacher must pass the NTE has been raised.

* **Alternate certification:** Alternate certification requirements were established in 1986. A prospective teacher must have a BA, pass a certification test, acquire additional training as specified by the state and teach in an area of critical need.

* **Competency testing:**

* **Education and preservice training:** In 1985 the State Board of Education required students studying to be teachers to pass the communications skills and general knowledge portions of the National Teacher Examination prior to admission into teacher education programs. Students must pass the professional knowledge and teaching speciality portions of the test in order to exit the program and receive initial certification.

* **Evaluation programs for teachers:** Since 1982, all schools have conducted annual performance evaluations of professional school employees. In 1985, the system for teachers was revised to include teacher skills associated with increased student achievement. This system is now being used throughout the state.

* **Career ladders and merit pay plans:** Sixteen districts began piloting the Career Development Program in 1985. The program combines rewards for performance, the new appraisal system, and increased and different responsibilities for professionals who have gained expertise in the classroom. The state also gives each local school system $100 per teacher to be used for staff development.

* **Staff development:** A one time stipend of $250 was provided to teachers in LEA's outside the 16 career ladder pilots who were required to complete 30 hours of Teacher Effectiveness Training prior to June 30, 1987.

* **Forgivable loans to attract new teachers:** The 1986 General Assembly established the teacher recruitment office as part of the Teacher Enhancement

Program. Two of the four scholarship/incentive grant programs established included forgivable loans: 200 scholarships at $2,000 per year for four years for prospective teachers entering college; and, 150 scholarships not to exceed $1,000 for college tuition for college graduates or certified teachers wishing to be certified or recertified in areas of need. In 1987, the General Assembly created a teaching fellows program that provides 400 outstanding high school seniors with a $5,000 per year scholarship/ loan. This will be forgiven if the student teaches in North Carolina public schools.

* **Other programs to address the teacher shortage:** The 1986 General Assembly established the teacher recruitment office as part of the Teacher Enhancement Program. Four scholarship/incentive grant programs were established: 200 scholarships at $2,000 per year for four years for prospective teachers entering college; 150 scholarships not to exceed $1,000 for college tuition for college graduates or certified teachers wishing to be certified or recertified in areas of need; 150 scholarships of $1,000 for teacher aides; and 150 incentives of $3,000 awarded one time only to career teachers who agree to teach in a subject or geographic area of need. An additional $4.4 million was appropriated for local public school units to train and develop personnel in high priority areas of need.

* **Teacher recognition/awards:**

VI. Special Needs

* **Program enhancements in computers:** In 1983, a legislative committee to study computer literacy in the schools recommended that the schools provide one computer for every 50 students to allow 30 minutes per week of computer access time. By the end of the 1986-87 school year, the number of computers in the schools was over 41,500 for a ratio of one computer for every 26 students. This program is being financed by state funds of $28.4 million for computer hardware, software, maintenance and staff development.

* **Program enhancements in communications and technology:** Distance learning by satellite is being used in the state to address the pupil and teacher shortages in math, science and foreign languages. A pilot program for technological applications was begun in 1985. Each high school in the state with a 9-12 enrollment of fewer than 400 has a satellite dish; a program of instruction using this technology will begin in the Fall of 1988.

* **Programs for the gifted:** Summer school and programs for exceptional children are required to be provided under the Basic Education Program.

* **Programs for the handicapped:**

* **Adult literacy:**

* **Changes in length of school day and year and attendance:** The minimum requirement of 5.5 hours of instructional time per day per student stipulated by the Basic Education Act results in a slight lengthening of the day in many schools.

* **Programs to lower class size:**

* **Parental involvement:**

* **Disciplinary policies:**

* **Guidance/counseling:**

* **Facilities:** In 1987, the legislature approved changes to the business taxes that will produce more than $1.1 billion over the next ten years. Combined with local sales taxes earmarked for school construction, $3.2 billion for school construction should be available.

VII. Finance

* **Tax increases for reforms:** The state permitted localities at their option to add an additional one cent on to the sales tax to support facilities or program enhancements.

* **Funding innovations such as corporate donations or educational partnerships:**

* **Teacher/administrator salary increases:** Teacher salaries rose $4,280 on average (23%0 over the past two years.

* **Incentive programs for schools and teachers:**

Summary of Education Reforms Since January of 1982

STATE: Ohio

HISTORY: In 1978, a coalition of education organizations in the state prepared a Blueprint for Excellence which identified major areas of reforms to be made in education in the state. Each year since that time the Board of Education has identified an area of emphasis for reform action. The State Board of Education and the Governor proclaimed 1983-84 as the Year of Educational Excellence for All. Six areas for reform were identified: administrative leadership; educating the public; public participation in the schools; community involvement; ownership and pride by the taxpayers; and increasing student productivity. Other major reforms were enacted in 1987 related to teacher certification, student testing and competency programs, and certification for administrators.

COST: The state's share of school revenues increased from 43.6% in 1983 to 46.3% in 1986. Over this same period, state aid increased by 31%.

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:** New administrator standards were adopted in 1987 which stress instructional leadership as well as management skills.

* **Competency testing for administrators:**

* **Evaluation programs for administrators:**

* **Establishment of administrative staff development programs:** Seminars and conferences are available to school administrators in the areas of financial management, minimum standards and other current educational matters. The Division of In-service education provides a host of teacher and administrator in-service programming in connection with "The Year of....." program.

* **Technical assistance for schools:** Technical assistance is provided to schools by state staff. Major areas of concentration are voluntary desegregation, school finance and computer services.

II. School or District Accountability

* **Academic bankruptcy:**

* **School or district evaluation:** (Each district is evaluated every five years on the basis of meeting minimum standards.)

* **Changes in school governance:**

* **Consolidation:**

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:** In the 1984-85 school year, the state initiated a pilot early childhood education program. Plans are underway to extend the program.

* **Mandatory kindergarten and/or full day kindergarten:** All local districts are required to offer a minimum of 1/2 day kindergarten. Attendance is not required.

* **Special early childhood programs for handicapped or gifted:**

* **Other early intervention programs or activities:**

* **Prime time programs - smaller classes for elementary years:** Standards adopted in 1983 stipulated that the districtwide ratio of teachers to student for grades K-4 could not exceed 1:25.

IV. Students

* **Changes in the curriculum:** In 1983, the State Board adopted a requirement for competency-based curriculum. Local boards are required to develop a competency-based course of study. Teachers were also required to develop lesson plans.

* **Increased requirements for high school graduation:** The State Board of Education added an additional unit of mathematics as a requirement for high school graduation, effective in 1987. Total units requirements were increased from 16 to 17.

* **Competency testing:** The minimum standards for elementary and secondary schools, developed in 1983, require competency-based education in the basic skills. Statewide achievement and abilities tests are being phased-in from 1987 - 1989 for

grades 4, 6, 8 and 10. These tests are being used to measure how well students and schools are doing compared to national averages, and neighboring schools. Test scores will be used for purposes of accountability.

* **Changes in placement or promotion policies:**

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:** The State Board of Education offers a Certificate of Achievement to students who successfully complete 4 years of English, 3 each of science, mathematics and social studies, and 3 of one foreign language or 2 of two different languages; or successfully complete a vocational competency program based on trade skills.

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:** Remedial intervention for students who do not meet competency requirements specified in locally developed competency-based curriculum requirements has been required since 1983. The Reading-Recovery program was implemented in the 1984-85 school year.

* **Programs for at-risk youth:** A recent focus of the State Board of Education is on programs for at-risk youth. Ohio is piloting the Educational Work Experience Program, an outgrowth of the Occupational Work Adjustment Program for dropout prone youth of the 1970's. In 1984, increased emphasis was placed on dropouts and a goal was set of decreasing each year the percentage of secondary pupils who drop out. Districts are required to report this information to the state and the state issues a report annually on progress in this and eleven other areas.

* **Increased homework requirements:** In 1984, increased emphasis was placed on local districts providing meaningful homework to students and recording that homework had been completed. Districts are required to report this information to the state and the state issues a report annually on progress in this and eleven other areas.

V. Teachers

* **Instructional time:** The 1983 standards increased the instructional time required to be given to teaching the basics.

* **Certification changes:** New quality standards for teachers were adopted in 1987. A one-year internship is required as is continuing education.

* **Alternate certification requirements:**

* **Competency testing:** Teachers are required to pass a competency exam prior to certification.

* **Education and preservice training:** New standards were adopted for teacher education which increase requirements in major and minor teaching areas, restrict entrance to teacher training programs, and require exit exams. Also, all teacher training institutions must establish a recruitment program, according to state standards, that includes ways of identifying outstanding prospective teachers from diverse backgrounds. Teaching candidates must be selected by a university through a formal application process. Each teacher, including elementary education instructors, must have an academic discipline.

* **Evaluation programs for teachers:**

* **Career ladders and merit pay plans:** Pilot programs are now operating in Toledo and Columbus.

* **Staff development:** Seminars and conferences are provided for teachers in conjunction with the annual state reform focus.

* **Forgivable loans to attract new teachers:** A program of forgivable loans was begun in 1987 in order to attract new teachers to the profession. Non-minority instructors must teach in shortage areas - either subject or geographic. Minority instructors may obtain non-restricted forgivable loans. A loan purchase program is also available to consolidate the indebtedness of prospective teachers in return for a commitment of service.

* **Other programs to address the teacher shortage:** (Recruitment is being handled via the teacher training institutions.)

* **Teacher recognition or awards:**

VI. Special Needs

* **Program enhancements in computers:** A statewide computer network has been instituted for accounting purposes. Its use for instructional purposes is left to the option of the local district. The state has developed a computer center and provides technical assistance to districts in computer use.

* **Program enhancements in communications and technology:**

* **Programs for the gifted:** A recent state requirement obligates all local districts to identify all gifted students.

* **Programs for the handicapped:**

* **Adult literacy:**

* **Changes in length of school day and/or year and attendance:**

* **Programs to lower class size:**

* **Parental involvement:** The Department of Education has developed a brochure for parents on how to be partners in the early learning activities of their children.

* **Disciplinary policies:** Revised minimum state standards mandate that a code of conduct be adopted by each school district which addresses the rights of students, issues related to school conduct, and due process.

* **Guidance/counseling:**

* **Facilities:**

VII. Finance

* **Tax increases required to implement reforms:**

* **Funding innovations such as corporate donations or educational partnerships:**

* **Teacher salary increases:** Significant salary increases were enacted to increase the average salary each year in the 1980's

* **Incentive programs for schools or teachers:**

Summary of Education Reforms Since January of 1982

STATE: Pennsylvania

HISTORY: Beginning in 1983, the Department of Education instituted a number of changes in the laws and regulations governing public education. These changes included setting higher curriculum standards and more rigorous requirements for high school graduation, a program of loan forgiveness for math and science teachers, competency testing for math and reading, supporting and requiring remedial instruction, and setting higher standards for teachers and administrator preparation and certification. In 1987-88, a series of further efforts to improve student achievement and school performance was undertaken in the areas of school accountability, incentives to schools, and professionalism of teachers.

COST: In 1985, and additional $28 million was appropriated to finance education reforms. $32 million was appropriated in 1986 and $35 million in 1987. The state's share of school revenues declined slightly between 1983 and 1986 from 45.6% to 45.3%. During that same period, state aid grew by 19%. Since 1985, the cost of education reform programs has exceeded $100 million

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:** In 1986 school districts were required to develop professional development plans to meet the educational needs of school districts and their professional employees. The law also requires all superintendents, newly commissioned after June of 1988, to earn 6 professional development credits every five years.

* **Competency testing for administrators:**

* **Evaluation programs for administrators:** The National Association of Secondary School Principal's Assessment Program is currently run at two sites in the state. Expansion of the program is planned.

* **Establishment of administrative staff development programs:** Pennsylvania has expanded its program of regional executive academies for administrators, and focused them on the supervision and evaluation of teachers. A new Principal's Academy for Instructional Leadership, begun in 1987 will train over the next three

years more than 1000 of the state's public school principals to be more effective instructional leaders.

* **Technical assistance for schools:** The Department of Education's Management Assistance Division helps school districts solve problems through financial consulting services and by conducting staffing, transportation and building studies on request. A new school cooperation committee, convened by the Governor, is leading a statewide effort to achieve more constructive labor-management relationships at the local level.

II. School or District Accountability

* **Academic bankruptcy:**

* **School or district evaluation:** (A new program, School Performance Incentives, will provide state funds to reward schools for improvements beginning 1988-89. This program will give bonuses to schools which measurably and significantly improve their performance on several indicators of student achievement, including: dropout rates, going to higher education rates, student attendance rates, participation in Advanced Placement, rates of mastery on vocational skills tests, and library usage.)

* **Changes in school governance:**

* **Consolidation:**

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:** In 1983, the legislature appropriated funds for a pre-school program for at-risk children.

* **Mandatory kindergarten and/or full day kindergarten:** (All school districts in the state already offer half day or full day kindergarten programs.)

* **Special early childhood programs for handicapped or gifted:** State funded early intervention programs for disabled youngsters in each of the state's 29 intermediate units currently serve about 13,000 children.

* **Other early intervention programs or activities:** Increased emphasis has been placed on developmental curriculum and teacher training to make it possible for

disabled children to move more easily into regular school programs when they are of school age.

* **Prime time programs - smaller classes for elementary years:**

IV. Students

* **Changes in the curriculum:** Revised curriculum regulations set forth new course requirements and curriculum objectives for the elementary and secondary grades. These encompass English, science, social studies, mathematics, health, physical education, art, music, and vocational education. Schools are also required to make a course in computer science available to students.

* **Increased requirements for high school graduation:** Total graduation credit requirements have been increased from 13 credits over three years of study to 21 credits over four years of study. Particular emphasis was placed on mathematics and science by tripling graduation requirements in these areas (from one to three credits). These requirements will take effect in 1989.

* **Competency testing:** A statewide testing program has been adopted which measures student's competence in reading and mathematics in the elementary and middle grades. The tests are administered in grades 3, 5, and 8 and schools are required to provide remedial instruction for students whose scores are below a certain level. State funds are provided for this purpose.

* **Changes in placement or promotion policies:**

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:** Beginning in 1988, new Pennsylvania Skills Certificates were awarded to graduating seniors who elect to take - and earn exemplary scores on - one of more than 40 vocational mastery tests available. The state is promoting expansion of advanced placement programs in its schools through a series of state-sponsored workshops and grants for teacher training.

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:** As part of Pennsylvania's statewide basic skills competency testing programs for students in grades 3, 5, and 8, schools are required to provide remedial instruction for all students whose scores on the tests fall below a certain level.

* **Programs for at-risk youth:** Student Assistance Programs, designed to identify and deal with student drug and alcohol problems and potential suicide, have been initiated in 80 of the state's 500 school districts. The state plans to expand them to all districts by 1991. Comprehensive teen pregnancy programs serve students from more than 100 school districts, and a statewide drug and alcohol curriculum is being used by 400 of the 500 districts. The Successful Students Partnership is a dropout prevention program which is underway in 18 districts with high dropout rates. Plans include more than doubling the number of districts in the program.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:**

* **Certification changes:** Beginning teachers are required to complete an induction period under the guidance of a local district support team with the authority to recommend whether a new teacher should be certified to teach in Pennsylvania. Also, after June 1, 1988, new teachers are required to pass a battery of tests to be certified.

* **Alternate certification requirements:**

* **Competency testing:** (Anyone applying for his or her first Pennsylvania teaching certificate after June 1, 1988, will be be required to pass a battery of tests in order to qualify. The tests will measure general knowledge, professional knowledge, subject area, and basic skills.)

* **Education and preservice training:** A new state-funded Academy for the Advancement of Teaching conducts demonstration projects, research and special services to improve undergraduate education for future teachers and professional development of teachers. The priority of the Academy is to prepare teachers to work effectively in urban and rural areas.

* **Evaluation programs for teachers:**

* **Career ladders and merit pay plans:**

* **Staff development:** By law, every school district is required to develop professional development plans for its employees, following regulations adopted by the State Board of Education and guidelines issued by the Secretary of Education. Districts must also provide a structured induction period for each new teacher who must successfully complete it before he or she can receive permanent certification. In addition, five lead teacher centers will be funded to provide training and support

to individuals who have been given lead teacher responsibilities by their school districts.

* **Forgivable loans to attract new teachers:** Funds are provided as forgivable loans to students who teach mathematics and science in the public schools.

* **Other programs to address the teacher shortage:** The 1983-84 budget included funds to be used for training math and science teachers. Students were encouraged to enroll in math and science teaching programs and math and science graduates are encouraged to enter the teaching profession. Funds are earmarked for retraining science and mathematics teachers and to develop public/private partnerships to improve education.

* **Teacher recognition or awards:** Each summer, 10 - 12 teachers are hired as Special Assistants to the Secretary of Education. In addition, the statewide Teacher of the Year program recognizes nine finalists and one teacher of the year.

VI. Special Needs

* **Program enhancements in computers:** New curriculum requirements stipulate that every school district make a course in computer science available to students.

* **Program enhancements in communications and technology:** A state-supported Telelearning Project uses telephone and computer technology to teach students in about 30 school districts in remote areas of the state. Also, a statewide electronics communications network, PENN*LINK, is connecting all school districts, intermediate units and vocational schools.

* **Programs for the gifted:** Each summer, Pennsylvania runs five 5-week Governor's schools for talented high school students (arts, sciences, business, agriculture and international studies) in cooperation with five major universities. In addition, 10 regional Schools of Excellence provide other students with two-week enrichment experiences in such areas as arts, sciences, classic logic, languages and environmental studies.

* **Programs for the handicapped:** A technology mini-grant program each year provides $800,000 in grants to teachers for equipment which will open new learning opportunities for their disabled students.

* **Adult literacy:** State funds support community-based volunteer programs to combat illiteracy. State funding has increased from $2 million in 1986-87 to $5 million in 1987-88. Further increases are planned.

* **Changes in length of school day and/or year and attendance:**

* **Programs to lower class size:**

* **Parental involvement:** The Department is continuing its emphasis on the family's role in the success of their children at school with a new broad-based campaign "Families and School - Support from the Home Team," which expands upon homework, attendance and discipline to emphasize engendering early success and a sense of self-worth in children.

* **Disciplinary policies:**

* **Guidance/counseling:**

* **Facilities:** For the first time in 19 years, the state increased reimbursement for school construction and renovation. Per pupil reimbursement increased by 70%.

VII. Finance

* **Tax increases required to implement reforms:**

* **Funding innovations such as corporate donations or educational partnerships:** The state is supporting a variety of educational partnerships, including a statewide effort to increase the number of high school graduates who go on the college.

* **Teacher/administrator salary increases:**

* **Incentive programs for schools or teachers:** Financial incentives will be provided to schools which improve the performance of their students on basic skills tests, dropout rates, and going to higher education rates.

Summary of Education Reforms Since January of 1982

STATE: South Carolina

HISTORY: In 1984, the South Carolina Legislature approved the Governor's proposal for education reform and passed the Education Improvement Act of 1984. Highlights of the act include increasing teachers salaries, strengthening remedial instruction, raising academic standards, and providing incentives for education.

COST: In 1985, the legislature appropriated $217.3 million in additional state funds to finance education reforms, financed through an increase in the sales tax. State appropriations for reforms were increased in 1986 to $227.6 million and to $240.6 million in 1987. The state's share of school revenues rose from 54.1% in 1983 to 58.3% in 1986. Over this period, state aid grew by 47%.

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:**

* **Competency testing for administrators:**

* **Evaluation programs for administrators:** School districts are required to annually evaluate administrators using procedures developed by the state.

* **Establishment of administrative staff development programs:** In the 1983-84 school year, an Assessment Center Program began operations to assist districts and schools assess principals. Principal candidates must be assessed for instructional leadership and management capabilities before appointment. A written report of this assessment must be forwarded to the board of trustees of the district before an appointment is made. School administrators must take part in seminars on administrative skills every 2 years. A principal incentive program is available for principals who demonstrate superior performance. A leadership academy was also established in 1984. Persons who have demonstrated outstanding potential as principals may be given the opportunity to serve an apprenticeship as a principal in the selected district.

* **Technical assistance for schools:** A program of technical assistance to school districts was begun in 1984.

II. School or District Accountability

* **Academic bankruptcy:** Outstanding schools are rewarded; intensive technical assistance is provided to help districts meet state standards; as a last resort, the state is authorized to directly intervene in schools and districts that fail to correct educational deficiencies. The Division of Public Accountability was created in the State Department of Education to plan, monitor and review programs developed under the Education Improvement Act, and provides each year an assessment of the EIA for consideration by a broad range of review committees and the General Assembly.

* **School or district evaluation:** Schools are evaluated to determine performance in accordance with the quality of education program.

* **Changes in school governance:** If quality of eduction in a district id declared impaired, the State Superintendent may: declare a state of emergency; furnish advice and assistance, or recommend that the governor declare the superintendency vacant.

* **Consolidation:**

* **Parental involvement in school policymaking:** The Education Improvement Act states that each school has active parent and teacher participation on the School Improvement Council and in parent-teacher groups.

III. Early Childhood

* **Pre-kindergarten programs:** An early childhood education program is offered statewide. These are voluntary one-half day programs that the district may contract to provide.

* **Mandatory kindergarten and/or full day kindergarten:** All five year olds are required to attend either public or private kindergarten.

* **Special early childhood programs for handicapped or gifted:** Four-year-olds may attend optional child development programs for those who have predicted significant readiness deficiencies.

* **Other early intervention programs or activities:** In 1984, a program was established to identify children needing special assistance in the early years.

* **Prime time programs - smaller classes for elementary years:**

IV. Students

* **Changes in the curriculum:** Changes include the establishment of educational objectives in science and in the state's basic skills teaching and testing program. Other areas of concentration include the emphasis of agriculture on the state's economy, and the history of Black people as part of the social studies and history courses.

* **Increased requirements for high school graduation:** New graduation requirements include 3 (up from 2) units of mathematics, 2 (up from 1) units of science, 4 units of English, 3 units of social studies, and 1 unit of phys. ed./health. In addition, new guidelines require school districts to offer a minimum of 5 each of mathematics and science units. Students will be required to take at least 4 units each year in grades 9-12 and a total of 20 units for graduation.

* **Competency testing:** Every student must pass a basic skills exit examination to receive high school diploma.

* **Changes in placement or promotion policies:** Each school district is required to develop a promotion policy based on academic achievement and other factors.

* **Changes in policies re extracurricular participation:** Students must have an overall passing grade in four courses to participate in interscholastic activities.

* **Academic recognition programs:**

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:** Special instruction in the basic skills - math, reading and writing - is provided to every student who does not meet the state's basic skills standards.

* **Programs for at-risk youth:** The South Carolina Commission on Alcohol and Drug Abuse has established a program to provide alcohol and drug abuse intervention, prevention and treatment services for the public schools.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:** Students are not permitted to be absent for more than 10 days a year without the approval of the school board. Unnecessary paperwork and classroom interruptions affecting teachers are being reduced through increased use

of computers. The teacher's year has been extended to 190 days to provide 5 additional days for planning.

* **Certification changes:** (Certification changes were made in the Educational Improvement Act of 1979.)

* **Alternate certification requirements:** Professionals in a variety of fields are permitted to accelerate their training as teachers. Individuals with B.A. degrees in areas of critical areas of need do not have to be fully certified if they have a BA, pass a certification test, can demonstrate subject matter expertise and teaching competency, and receive additional instruction determined by the state to be necessary to complete full certification within three years.

* **Competency testing:** (Competency testing was mandated in 1979.)

* **Education and preservice training:** Prospective and current teachers receive increased preparation in their subject area; requirements for approval of teacher preparation programs have been upgraded; selected colleges are developing center of excellence for preparing teachers; each year of teacher training includes field experiences directly related to a practical classroom situation; teaching as a career is stressed in high school and college with tutoring opportunities for interested students.

* **Evaluation programs for teachers:** The EIA strengthened a 1979 mandate for teacher evaluation by requiring that formal evaluations of continuing teachers take place not less than every three years.

* **Career ladders and merit pay plans:** A teacher incentive program was established in 1984 to reward teachers who demonstrate superior performance and productivity.

* **Staff development:** Competitive grants are provided to teachers to improve teaching practices and in-service programs on effective schools and classrooms. Centers of Teaching Excellence are being developed at selected colleges.

* **Forgivable loans to attract new teachers:** Forgivable loans are provided to train teachers in critical areas.

* **Other programs to address the teacher shortage:** Reimbursement is provided for successful completion of a three hour credit course in a field of specialization at a South Carolina public or private college, provided employment in that field is in a South Carolina public school for the succeeding year. Other measures include: recruiting and training business and industry employees to work part-time in schools; identifying areas of critical need and granting loans to teach mathematics, science, and other subjects in counties with a high need for teachers. A teacher

recruitment center was established in 1984. Teachers' salaries have been raised each year to meet the southeastern average.

* **Teacher recognition or awards:** The EIA establishes the development and implementation of a teacher incentive program to reward teachers who demonstrate superior performance and productivity.

VI. Special Needs

* **Program enhancements in computers:** A program of technical assistance in computer use and technological applications was established in 1984.

* **Program enhancements in communications and technology:**

* **Programs for the gifted:** Effective August of 1987, gifted and talented students at the elementary and secondary levels must be provided programs during the regular school year or during summer school to develop their unique talents in the manner the State Board of Education must specify and to the extent state funds are provided.

* **Programs for the handicapped:** Services provided to enable emotionally handicapped students to benefit from special education, as well as adequate educational services for trainable and profoundly mentally handicapped pupils.

* **Adult literacy:** $1 million was appropriated through the EIA in 1986-87 for adult literacy.

* **Changes in length of school day and/or year and attendance:** The school day is established as no less than six hours, and the school year was lengthened to 190 days.

* **Programs to lower class size:**

* **Parental involvement:**

* **Disciplinary policies:** Every school district is required to establish clear rules for student behavior under a uniform statewide system of enforcement.

* **Guidance/counseling:**

* **Facilities:** Beginning with FY '85, the state has provided funds on a per pupil basis to each school district for performing pressing repairs, renovations, and construction on school buildings.

VII. Finance

* **Tax increases required to implement reforms:** The reform package was financed through a 1 cent increase in the sales tax.

* **Funding innovations such as corporate donations or educational partnerships:** The EIA mandates that school districts adopt policies and procedures to encourage advice and suggestions from the business community, have business organizations encourage their members to become involved in efforts to strengthen the public schools, encourage businesses to participate in adopt-a-school programs, and encourage statewide businesses to initiate a Public Education Foundation to fund exemplary and innovative projects which support improvement in the public schools.

* **Teacher/administrator salary increases:** Salary increases were granted to teachers to raise them to the projected southeastern average.

* **Incentive programs for schools or teachers:** Incentive awards are provided to schools and school districts for exceptional success in improving performance, based on criteria established by the state. A principal incentive program is available whereby persons who have demonstrated outstanding potential as principals may be given the opportunity to serve an apprenticeship as a principal in the selected district.

Summary of Education Reforms Since January of 1982

STATE: Tennessee

HISTORY: A special legislative session was called by Governor Alexander in January of 1984. In March, the Tennessee General Assembly enacted the Comprehensive Education Reform Act of 1984. The act introduced a new career incentive pay system for classroom teachers and provided major new funding for local school systems. The act increased teachers salaries, provided comparable career ladders and incentive pay supplements for school administrative staff, extended the school year and created a tuition loan program for college students planning careers as teachers in math or science. A variety of other substantive reforms were also made. In 1985, the reward system for the career ladder program was redesigned and additional reforms related to pre-kindergarten and at-risk students were enacted.

COST: The State of Tennessee appropriated $173.3 million in additional state funds for educational reforms in 1985. In 1986, the appropriation was for $166.8 million; in 1987, for $193.7 million. The state's share of school revenues increased from 47.2% in 1983 to 50.0% in 1986. Growth in state aid over this period was 33%.

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:**

* **Competency testing for administrators:**

* **Evaluation programs for administrators:** An extensive evaluation system has been developed for administrators and teachers, to determine movement on the career ladder. The results of these evaluations are linked to certification decisions. An assessment center was established in 1984 for principals.

* **Establishment of administrative staff development programs:** The act includes a three step career ladder, incentive pay program for principals, assistant principals and supervisors. A principal-administrator academy was established to develop instructional leadership, provide training in evaluation techniques and procedures, and offer seminars for provisional principals and supervisors.

* **Technical assistance for schools:**

II. School or District Accountability

* **Academic bankruptcy:**

* **School or district evaluation:**

* **Changes in school governance:** The State Board of Education was restructured as part of the 1984 Act to provide clearer lay governance for public education.

* **Consolidation:**

* **Parent involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:** A pre-kindergarten summer program was established in 1985 using career ladder teachers.

* **Mandatory kindergarten and/or full day kindergarten:** $1,25 million was appropriated in 1984 for first grade readiness, making kindergarten programs available to all preschoolers.

* **Special early childhood programs for handicapped or gifted:**

* **Other early intervention programs or activities:**

* **Prime time programs - smaller classes for elementary years:** A program was included in the Comprehensive Education Reform Act which provides one state-funded teacher aide for every seventy-five students in ADM in grades one through three. Each LEA has the option of applying such funds to employing additional full-time teachers in grades one through three rather than aides.

IV. Students

* **Changes in the curriculum:** A total of $1.4 million was appropriated in the Act for new funding for programs for gifted students, music and art in the early grades, and more math and science laboratory equipment.

* **Increased requirements for high school graduation:** The State Board approved increased high school graduation requirements starting with the freshman class of 1983-84, to 20 total units and two years each in mathematics and science, up

from 18 and one each in science and math. Other credit requirements include 4 in English, 1 1/2 in social studies and 1 1/2 in phys. ed.

* **Competency testing:** The State Board of Education requires high school students to pass the Tennessee Proficiency Test to receive a regular high school diploma. Criterion referenced basic skills testing was implemented in the Spring of 1985 for all students in grades 3,6 and 8. A first grade screening test is required.

* **Changes in placement or promotion policies:**

* **Changes in policies re extracurricular participation:**

* **Academic recognition:**

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:** Remedial programs are provided for all students who do not meet academic performance standards on competency tests.

* **Programs for at-risk youth:** Extended day and year program for at-risk students was begun in 1985.

* **Increased homework requirements:**

VII. Teachers

* **Instructional time:**

* **Certification changes:** Entrance requirements include a passing score on the California Achievement Test or Pre-Professional Skills Test; a significant portion of three academic quarters of classroom observation and teaching beginning in the sophomore year; and assignment to a tenured teacher for guidance, evaluation and instruction. A probationary entry year has been added for new teachers prior to regular state certification. This will give local school authorities four years, rather than three to evaluate new teachers before granting them tenure. A greater role is provided for local school leaders in the evaluation of teachers for purposes of state certification decisions.

* **Alternate certification:**

* **Competency testing:** Entrance requirements include a passing score on the California Achievement Test or Pre-Professional Skills Test. Rigorous evaluations of teacher performance is required at both the state and local system levels.

* **Education and preservice training:** Increased standards have been implemented for teacher training. State certification has been revoked for institutions with 30% or more of their students failing the State Teacher Exam in two consecutive years. Direct personal involvement in the public school setting, grades K-12, is required for all full-time College of Education faculty members.

* **Evaluation programs for teachers:** Advancement up the career ladder is tied to more rigorous evaluations of teachers at both the state and local system levels. A greater role is provided for local school leaders in the evaluation of teachers for purposes of state certification decisions.

* **Career ladders and merit pay plans:** The central element of Tennessee's reforms is a five step career ladder program ranging from the entry-level probationary teacher to the Career Level III teacher or top. Pay supplements are geared to the top three steps ranging from $1,000 to $7,000 on top of the teacher's regular pay. During the 1987-88 school year, this program was made optional for each teacher currently in the system. Local systems were also permitted to hire new non-career ladder teachers if no career ladder teachers are available.

* **Staff development:**

* **Forgivable loans to attract new teachers:** Tuition loan programs are available for students who pledge to teach math or science courses in Tennessee public schools for at least four years. These loans are forgivable on a year for year basis.

* **Other programs to address the teacher shortage:** Special entry pay supplements for apprentice-level teachers are available to provide additional incentives for young men and women to become teachers. Tuition loan programs are available for students who pledge to teach math or science courses in Tennessee public schools for at least four years. These loans are forgivable on a year for year basis.

* **Teacher recognition/awards:** Advancement along the career ladder provides both recognition and financial awards.

VI. Special Needs

* **Program enhancements in computers:** Nine million was appropriated in 1984 for the Computer Skills Next program to purchase computers for local schools and help students learn to use them before high school.

* **Program enhancements in communications and technology:** Local plans for technology use are required in order to receive state support for technology efforts.

* **Programs for the gifted:** Extended day and year program for gifted students was begun in 1985.

* **Programs for the handicapped:**

* **Adult literacy:**

* **Changes in length of school day and year and attendance:** The school year was extended in 1984 by five days for classroom instruction.

* **Programs to lower class size:**

* **Parental involvement:** Two demonstration programs have been implemented: EQUALS involves parents and citizens as role models in math classes; the Family Math Program provides training for a "hands on" approach for parents and children to work together in learning math.

* **Disciplinary policies:** An alternative schools program was created to promote classroom discipline.

* **Guidance/counseling:**

* **Facilities:** In 1988, state law was changed to permit local boards to use school facilities for before and after school services.

VII. Finance

* **Tax increases for reforms:** The state sales tax was increased by one cent to finance the reforms.

* **Funding innovations, such as corporate donations and educational partnerships:**

* **Teacher/administrator salary increases:** The General Assembly approved in 1984 a 10% increase in across the board pay for teachers, apart from the new pay supplements under the $50 million career incentive program.

* **Incentive programs for schools and teachers:** A program of awards for exemplary schools was begun in 1985.

Summary of Education Reforms Since January of 1982

STATE: Virginia

HISTORY: Since 1983, Virginia adopted a variety of reforms in public education. They include revised accreditation standards for public schools, revised certification standards for teachers, an evaluation program for beginning teachers substantial increases in teachers' salaries, and administrative assessment and training programs. In 1986, Governor Baliles appointed a Commission on Excellence in Education. The Commission made 36 recommendations designed to build on the Standards of Quality program mandated by the state constitution in 1970.

COST: State appropriations for public education increased almost 55 percent from 1983-84 to 1987-88.

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:**

* **Competency testing for administrators:**

* **Evaluation programs for administrators:** Assessment centers to assist school divisions in identifying and developing highly skilled public school principals have been established at two institutions of higher education in Virginia.

* **Establishment of administrative staff development programs:** Each school division is required by the Standards of Quality (Standard 9) to provide ongoing programs to meet the developmental needs and to increase the proficiency of teachers and administrative personnel. The Department of Education has collaborated school administrators in developing the Virginia Center for Educational Leadership to improve the skills of school administrators.

* **Technical assistance for schools:**

II. School or District Accountability

* **Academic bankruptcy:**

* **School or district evaluation:** In accordance with the Code of Virginia, all schools and school divisions must meet requirements of the Standards of Quality. Schools or school divisions that fail to meet those standards must be reported and the Department of Education works with the school division if necessary to help correct the deficiencies.

* **Changes in school governance:**

* **Consolidation:**

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:**

* **Mandatory kindergarten and/or full day kindergarten:**

* **Special early childhood programs for handicapped or gifted:**

* **Other early intervention programs or activities:**

* **Prime time programs - smaller classes for elementary years:**

IV. Students

* **Changes in the curriculum:** All school divisions are required by Standard 1 of the Standards of Quality to give highest priority to developing basic skills of each student . Basic skills objectives in reading, communications and mathematics are required for students in kindergarten through grade 6. Instruction in grades 7-12 must include essential skills and concepts of citizenship, as well as knowledge and skills necessary to qualify for further education and/or employment. New accreditation standards emphasize literacy, the use of phonics in teaching of reading, and greater emphasis on writing, speaking, listening, mathematics and foreign languages. The new standards also place increased emphasis on world, American and Virginia geography. An additional credit in fine arts or practical arts will be required for high school graduation.

The Board adopted standards of learning and curriculum guidelines for a comprehensive family life education program for grades K-12. Virginia offers a publicly supported summer academic program for high school students in German, Spanish, French, Russian and Asian studies, including some instruction in Japanese, Chinese, and Korean languages. The state is expanding the magnet school program begun in 1984. Four regional schools for science and technology opened in 1985. In

1987 the school of the arts in Norfolk was expanded to a full-time program. Other school divisions are requesting expansion of magnet schools to other sections of the state.

Through the military-education partnership project, an up-to-date electronics curriculum has been developed in which 60 percent of the state's electronics teachers now participate. The "2+2" program to prepare master technicians by combining the last two years of high school with two years of post-secondary training in electronics/ electromechanical technology has been expanded to three sites.

* **Increased requirements for high school graduation:** An additional credit in fine arts or practical arts is required for high school graduation, beginning with the 1988-89 school year. Graduation requirements include 2 units of math or science and 1 unit of either math or science; 4 units of English; 3 units of social studies; and 2 units of physical education; and 1 unit of fine or practical arts for a total of 21 units. The state also has requirements for a 23 unit diploma which has the Governor's Seal attached.

* **Competency testing:** Student competencies are measured by three types of tests: criterion-referenced tests to help classroom teachers assess the progress of individual students in acquiring basic skills; norm-referenced tests to measure the achievement of Virginia students against national norms; and minimum competency tests which must be passed to obtain a high school diploma. Literacy tests will be given to students in grade 6 for the first time during 1988.

* **Changes in placement or promotion policies:**

* **Changes in policies re extracurricular participation:**

* **Academic recognition programs:**

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:** Alternative education programs are to be provided by each school division for students whose needs are not met in the traditional classroom (Standard 6). All school divisions are also required to make provisions for reducing illiteracy.

* **Programs for at-risk youth:** All school divisions are required to make provisions for minimizing the number of students who leave school before graduating.

* **Increased homework requirements:**

VII. Teachers

* **Instructional time:**

* **Certification changes:** Beginning teachers are required to demonstrate satisfactory performance in the classroom before receiving a regular certificate. Experienced educators are employed as classroom observers of on-the-job performance of beginning teachers.

* **Alternate certification requirements:** After passing the NTE, arts and sciences graduates with employment contracts may be given two-year provisional certificates. They must complete nine semester hours through an accredited college or university during this provisional period. (Local school divisions may submit alternatives to the semester hour requirement for state approval.) Independent observers assess these instructors according to state evaluation criteria. If all provisions are successfully completed, the state grants full certification.

* **Competency testing:** In 1984 Virginia implemented the comprehensive skills assessment model developed through its Beginning Teacher Assistance Program. Fourteen competencies have been identified; beginning teachers are assessed on these competencies prior to full certification.

* **Education and preservice training:**

* **Evaluation programs for teachers:**

* **Career ladders and merit pay plans:**

* **Staff development:** Each school division is required to provide on-going programs designed to meet the developmental needs and to increase the proficiency of teachers, other instructional personnel, and administrative personnel. (Standard 9)

* **Forgivable loans to attract new teachers:**

* **Other programs to address the teacher shortage:** A training institute has been established to help teachers add mathematics and science to their certifications and to attract new teachers to these fields. In 1987 the math, science and foreign language scholarship program, established in 1983, provided forgivable loans to almost 700 students who were planning to become teachers in these disciplines. Special education was added as an approved subject for these loans.

* **Teacher recognition/awards:**

VI. Special Needs

* **Program enhancements in computers:** Potomac Edison Company is undertaking the installation of an interactive computer classroom in five of the Virginia school divisions served by the company. The second phase of the project will include installing equipment for interactive computer classrooms in the five remaining Virginia school divisions in Potomac Edison's territory. The classrooms are used primarily for math, science and English.

* **Program enhancements in communications and technology:** In 1987, a program was put in place to expand the use of electronic classrooms in the five educational television broadcast areas of the state.

* **Programs for the gifted:** All school divisions are required in grades K-12 to conduct programs for the early identification of gifted and talented students and to offer differentiated instructional opportunities for them. The Governor's School Program for the gifted included 28 sites that operate as academic year programs, summer statewide residential programs, regional residential programs, or summer non-residential programs. The technical arts has been identified as an area of gifted study (Standard 5).

* **Programs for the handicapped:** All school divisions are required to provide special education programs for students with handicapping conditions. While Virginia's programs for the handicapped predate recent reform initiatives, their expansion is an integral part of the reform package. Three centers serving 11 local school divisions were established in the last three years to assess the vocational education needs of handicapped students (Standard 4).

* **Adult literacy:**

* **Changes in length of school day and year and attendance:** New accreditation standards require all students to attend school a full day, which must be allocated to instruction without intrusions by extracurricular activities.

* **Programs to lower class size:** All school divisions are required to meet a state requirement of 54 certified instruction personnel per 1,000 students. The average state ratio is 67.2/1,000. (Standard 8)

* **Parental involvement:** Community involvement is required by school accreditation standards to promote mutual understanding in providing a quality educational program.

* **Disciplinary policies:** All school divisions are required to develop written standards of student conduct and attendance and to include them in their policy manuals. (Standard 7)

* **Guidance/counseling:** School divisions are required to provide career counseling for elementary and secondary students, including those with disabilities. Academic and vocational preparation must be available for students who plan to continue their education after high school, as well as for those who leave school and enter the work force. (Standard 3)

* **Facilities:**

VII. Finance

* **Tax increases required to implement reforms:**

* **Funding innovations such as corporate donations and educational partnerships:**

* **Teacher/administrator salary increases:** Virginia is making a concerted effort to bring the average salary of Virginia teachers up to the national average. The average annual salary of Virginia's teachers in 1986-87 increased to $25,041.

* **Incentive programs for schools and teachers:** The state's share of financing the Standards of Quality was increased from 77% in 1980-81 to 100% in 1987-88.

Summary of Education Reforms Since January of 1982

STATE: West Virginia

HISTORY: The State Board of Education developed a "Master Plan for Public Education in West Virginia" as a blueprint for long-range educational change. This plan provides a policy and program development framework for curriculum, professional practices, education personnel development, criterion referenced testing, state county school district testing, school effectiveness county accreditation and staff evaluation. In June of 1988, the Governor called a special session of the legislature on education reform. A broad range of initiatives were enacted, ranging from the denial of drivers licenses to persons under the age of 18 who have dropped out of school, an academic bankruptcy program, a transitional kindergarten program and statewide student testing and remediation.

COST: In 1983, West Virginia appropriated an additional $300,000 for education reforms. Appropriations increased in 1984 to $420,000 and in 1985 to $481,000. In both 1986 and 1987, $462,000 in additional appropriations were authorized. The state's share of school revenues increases from 62.2% in 1983 to 63.8% in 1986. During that period, state aid increased by 24%.

REFORMS:

I. Administration/Leadership

* **Training for school board members:**

* **Changes in certification for administrators:** An intern license was established to bridge the transition from academic preparation to the world of work. Alternative certification programs were defined to provide a non-traditional delivery system for individuals who hold a minimum of a BA. (Legislation passed in June of 1988 will require newly hired superintendents to have a MA degree or its equivalent.)

* **Competency testing for administrators:** Job-related content specialization tests are required for superintendents, principals ans supervisors of instruction.

* **Evaluation programs for administrators:** An assessment center for principals was established in 1985.

* **Establishment of administrative staff development programs:** The state has established an academy for training principals in 1985. It was designed to upgrade administrators knowledge and skills to provide leadership for more effective schools. The first leadership academy for training county special education directors was held

in 1987. It was designed to provide training for special education administrators to perform an active role in improving the effectiveness of teaching and learning for exceptional students.

* **Technical assistance for schools:**

II. School or District Accountability

* **Academic bankruptcy:** (The legislature enacted in June of 1988 a performance based accreditation system. The State Board of Education will develop criteria for school and student performance by January of 1989 and will grant either full approval, probationary approval or non-approval. If a school in not approved, the State Board may declare a state of emergency and intervene in the operation of the school. Students attending that school are permitted to transfer to the nearest fully approved school.)

* **School or district evaluation:** The 1983-84 school year was the first year of accrediting county school districts. Accreditation will proceed on a four year cycle. (In June of 1988, legislation was passed requiring the development of school report cards for each district.)

* **Changes in school governance:**

* **Consolidation:**

* **Parental involvement in school policymaking:**

III. Early Childhood

* **Pre-kindergarten programs:** (Legislation passed in June of 1988 requires that school districts make extra space in their facilities available for use for child care.)

* **Mandatory kindergarten and/or full day kindergarten:** (By 1989-90, a transitional kindergarten program will be made available for children who have completed the regular kindergarten program but who are not ready for first grade due to physical, social, emotional, perceptual or intellectual problems.)

* **Special early childhood programs for handicapped or gifted:** In 1985, each county school district was required to develop a coordinated service delivery plan for pre-school severely handicapped children in accordance with standards developed by the State Board of Education. Educational services were provided through a phased-in process which first served severely handicapped children who became four years of age prior to September 1, 1986, and then expanded to serve

severely handicapped children who became three years of age prior to September 1, 1987.

* **Other early intervention programs or activities:** (The June, 1988 legislation mandated hearing, vision, speech, language and developmental screening prior to enrollment in kindergarten.)

* **Prime time programs - smaller classes for elementary years:** Effective in the 1983-84 school year, the maximum class size for grade one and two was 25 students for each teacher. For kindergarten, the ratio was 1:20. Effective 1984-85, the maximum class size limit of 1:25 was extended to grades three through six.

IV. Students

* **Changes in the curriculum:** The state has developed new curriculum standards which include new emphasis on science, mathematics and technology. (June 1988 legislation prevents the school board from setting time-limited instructional requirements for K-fourth grade.)

* **Increased requirements for high school graduation:** Graduation requirements were increased in 1985. Requirements now include 4 units of English, 2 of math, 2 of science, 3 of social studies, 2 of phys. ed. for a total of 21 units.

* **Competency testing:** (The State Board was directed by the 6/88 legislation to develop a statewide testing program - WVA STEP - to determine the educational progress of all students.)

* **Changes in placement or promotion policies:** (In June of 1988, the legislature enacted a requirement that those students failing to meet STEP requirements would not be promoted to a higher grade.)

* **Changes in policies re extracurricular participation:** In January of 1984, the state began to require students to maintain a C average to participate in athletics and other extracurricular activities.

* **Academic recognition programs:**

* **Providing home instruction as an option:**

* **Revised and/or expanded remedial programs:** (The June, 1988 legislation requires that remedial instruction be provided in conjunction with the STEP program.)

* **Programs for at-risk youth:** A state drop-out prevention program was begun in 1985.

* **Increased homework requirements:**

V. Teachers

* **Instructional time:**

* **Certification changes:**

* **Alternate certification requirements:** Prospective teachers for areas of critical need only who request alternate certification must have a BA, pass a certification test, complete an internship, demonstrate competency in their field and in teaching.

* **Competency testing:** Job-related content specialization tests are required in 44 academic areas. Professional skills tests are mandated in reading, mathematics and writing and the ACT-COMP test is also required to assess speaking.

* **Education and preservice training:** Effective in 1985, students in approved college teacher preparation programs have to pass a basic skills proficiency test, a content area test, and a professional education performance assessment.

* **Evaluation programs for teachers:** Each of the 55 county school systems in West Virginia have an evaluation policy in place. All educational personnel are included.

* **Career ladders and merit pay plans:**

* **Staff development:** Each of the 55 county school systems in West Virginia must submit yearly a county staff development plan. All training must be job related and include a minimum of 18 hours.

* **Forgivable loans to attract new teachers:**

* **Other programs to address the teacher shortage:** A field-based training program is available for high need areas through a consortia which includes COGS, West Virginia State and West Virginia Institute of Technology.

* **Teacher recognition or awards:**

VI. Special Needs

* **Program enhancements in computers:**

* **Program enhancements in communications and technology:**

* **Programs for the gifted:** The first Governor's Honor Academy, a four week summer academy for gifted students in the humanities, fine arts, mathematics and science began in the summer of 1984.

* **Programs for the handicapped:** Since 1983, comprehensive model program guidelines in behavior disorders, communication disorders, gifted and specific learning disabilities have been developed. Best practices and programmatic and instructional improvement components have been established through these guidelines.

* **Adult literacy:**

* **Changes in length of school day and/or year and attendance:**

* **Programs to lower class size:**

* **Parental involvement:** Parent resource training centers were established in 1984.

* **Disciplinary policies:**

* **Guidance/counseling:**

* **Facilities:**

VII. Finance

* **Tax increases required to implement reforms:**

* **Funding innovations such as corporate donations or educational partnerships:**

* **Teacher/administrator salary increases:** In 1983, the Legislature increased the average salary of teachers by $2,000, including basic State aid pay and $40 increments for each year of experience. Also implemented was a provision to bring about salary equity among districts with a limit for districts with higher salaries.

* **Incentive programs for schools or teachers:** Improvement grants were made available in 1984 for administrators. A financial reward system was instituted which rewards institutional rather than individual performance.

Appendix 4

RESULTS OF EDUCATION REFORM QUESTIONNAIRE FOR SMALL, RURAL SCHOOL DISTRICTS

114 questionnaires were distributed in 13 states; 47 were returned from 10 states. The response rate was 41%.

The number and percentages of reponses are recorded below. In parentheses, the number of responses appears first, followed by the percentage of responses represented by the number. Where one number only appears, the number is the average number represented by all the responses.)

TYPE OF SCHOOL DISTRICT: (17/ 36%) Non-Metro Rural (30/ 64%) Non-Metro Small Center

	1981-82	1987-88
NUMBER OF SCHOOLS IN DISTRICT:	(7.44)	(7.39)
Percent decrease		(-.71%)
AVERAGE DAILY ATTENDENCE IN DISTRICT:	(2,563.38)	(2,456.68)
Percent decrease		(-4.16%)
TOTAL EMPLOYMENT IN DISTRICT:	(317.96)	(317.11)
Percent decrease		(-.27%)
ADMINISTRATIVE STAFF IN DISTRICT:	(12.43)	(12.37)
Percent decrease		(-.45%)
INSTRUCTIONAL PERSONNEL IN DISTRICT:	(158.53)	(161.78)
Percent increase		(2.05%)

1. Has your district implemented any changes in school policy or operations since January of 1982, that were designed to improve school administration or leadership in the following areas? If your answer is yes, please identify the school year of the implementation of the change and whether or not the change was the result of a state mandate or a local policy change.

	NO	YES		
			State Mandate	Local Policy
A. Training for school board members.	(19/40%)	(28/60%)	(18/64%)	(10/36%)
B. Changes in certification for administrators.	(28/60%)	(16/34%)	(14/88%)	(4/25%)
C. Competency testing for administrators.	(38/81%)	(5/11%)	(3/60%)	(2/40%)
D. Evaluation programs for administrators.	(9/19%)	(36/77%)	(25/69%)	(19/53%)
E. Establishment of administrative staff development programs.	(14/30%)	(29/62%)	(16/55%)	(19/66%)
F. Technical assistance for schools.	(25/53%)	(16/34%)	(8/50%)	(8/50%)

2. Has your district implemented any changes in school policy or operations since January of 1982, that were designed to improve school or district accountability in any of the following areas? If your answer is yes, please identify the school year of the implementation of the change and whether or not the change was the result of a state mandate or a local policy change.

	NO	YES	
		State Mandate	Local Policy
A. Academic bankruptcy plans whereby schools are held to certain standards of performance subject to civil or other legal action which could result in transfer of operational responsibility for the school if performance standards were not met.	(39/83%)	(6/13%)	(6/100%) (0/0%)
B. School or district evaluations.	(18/38%)	(28/60%)	(25/89%) (8/29%)
C. Change in school governance.	(40/85%)	(2/4%)	(0/0%) (1/50%)
D. Consolidation.	(35/74%)	(10/21%)	(0/0%) (10/100%)
E. Parental involvement in school policymaking.	(24/51%)	(20/43%)	(6/30%) (13/65%)

3. Has your district implemented any changes in school policy or operations since January of 1982, that were designed to improve early childhood education in any of the following areas? If your answer is yes, please identify the school year of the implementation of the change and whether or not the change was the result of a state mandate or a local policy change.

	NO	YES	
		State Mandate	Local Policy
A. Pre-kindergarten programs.	(33/70%)	(11/23%)	(3/27%) (10/91%)
B. Mandatory kindergarten and/or full year kindergarten programs.	(22/47%)	(23/49%)	(18/78%) (8/35%)
C. Special early childhood education programs for handicapped or gifted children.	(19/40%)	(26/55%)	(10/38%) (16/62%)
D. Other early intervention programs or activities.	(30/64%)	(12/26%)	(3/25%) (7/58%)
E. Smaller classes for elementary years.	(14/30%)	(33/70%)	(27/82%) (7/21%)

4. Has your district implemented any changes in school policy or operations since January of 1982, that were designed to improve student learning in any of the following areas? If your answer is yes, please identify the school year of the implementation of the change and whether or not the change was the result of a state mandate or a local policy change.

	NO	YES		
			State Mandate	Local Policy
A. Changes in curriculum.	(8/17%)	(38/81%)	(24/63%)	(24/63%)
B. Increased requirements for high school graduation.	(3/6%)	(44/94%)	(27/61%)	(25/57%)
C. Competency testing.	(19/40%)	(26/55%)	(19/73%)	(10/38%)
D. Changes in placement or promotion policies.	(19/40%)	(25/53%)	(12/48%)	(16/64%)
E. Changes in policies related to extracurricular participation.	(16/34%)	(28/60%)	(10/36%)	(20/71%)
F. Academic recognition programs.	(4/9%)	(19/40%)	(4/21%)	(15/79%)
G. Providing home instruction as an option.	(21/45%)	(23/49%)	(13/57%)	(14/61%)
H. Revised and/or expanded remedial programs.	(13/28%)	(31/66%)	(20/65%)	(15/48%)
I. Special programs for at-risk youth.	(19/40%)	(24/51%)	(8/33%)	(20/83%)
J. Increased homework requirements.	(34/72%)	(8/17%)	(3/38%)	(6/75%)

5. Has your district implemented any changes in school policy or operations since January of 1982, that were designed to improve the performance and availability of teachers in any of the following areas? If your answer is yes, please identify the school year of the implementation of the change and whether or not the change was the result of a state mandate or a local policy change.

	NO	YES		
			State Mandate	Local Policy
A. Changes in requirements related to instructional time.	(18/38%)	(28/60%)	(23/82%)	(10/36%)
B. Certification changes.	(19/40%)	(25/53%)	(25/100%)	(0/0%)
C. Alternate certification requirements.	(30/64%)	(13/28%)	(13/100%)	(0/0%)
D. Competency testing.	(23/49%)	(18/38%)	(18/100%)	(0/0%)
E. Education or pre-service training.	(19/40%)	(25/53%)	(18/72%)	(12/48%)
F. Evaluation programs for teachers.	(12/26%)	(33/70%)	(22/67%)	(17/52%)
G. Career ladders and merit pay plans.	(37/79%)	(5/11%)	(3/60%)	(2/40%)
H. Staff development.	(14/30%)	(29/62%)	(18/62%)	(20/69%)
I. Forgivable loans to attract new teachers.	(38/81%)	(5/11%)	(4/80%)	(2/40%)
J. Other programs to address the teacher shortage.	(35/74%)	(8/17%)	(4/50%)	(5/63%)
K. Teacher recognition or awards.	(19/40%)	(26/55%)	(8/31%)	(22/85%)

6. Has your district implemented any changes in school policy or operations since January of 1982, that were designed to meet special needs in any of the following areas? If your answer is yes, please identify the school year of the implementation of the change and whether or not the change was the result of a state mandate or a local policy change.

	NO	YES		
			State Mandate	Local Policy
A. Program enhancements in computers.	(5/11%)	(41/87%)	(9/22%)	(36/88%)
B. Program enhancements in communications and technology.	(27/57%)	(15/32%)	(4/27%)	(15/100%)
C. Programs for the gifted.	(14/30%)	(32/68%)	(16/50%)	(22/69%)
D. Programs for the handicapped.	(18/38%)	(23/49%)	(16/70%)	(16/70%)
E. Adult literacy.	(25/53%)	(21/45%)	(7/33%)	(17/81%)
F. Changes in the length of the school day and/or year.	(24/51%)	(20/42%)	(12/60%)	(12/60%)
G. Programs to lower class size.	(16/34%)	(30/64%)	(27/90%)	(7/23%)
H. Parental involvement.	(21/45%)	(21/45%)	(5/24%)	(18/86%)
I. Disciplinary policies.	(19/40%)	(26/55%)	(11/42%)	(21/81%)
J. Guidance/counseling.	(22/47%)	(22/47%)	(13/59%)	(14/64%)
K. Facilities expansion or improvement.	(17/36%)	(29/62%)	(5/17%)	(24/83%)

7. Has your district implemented any changes in the methods and levels of finance since January of 1982, in the following areas? If your answer is yes, please identify the school year of the implementation of the change and whether or not the change was the result of a state mandate or a local policy change.

	NO	YES		
			State Mandate	Local Policy
A. Local tax increases required to implement reforms.	(23/49%)	(22/47%)	(7/32%)	(17/77%)
B. Local bond issuances or referendums.	(30/64%)	(12/26%)	(1/6%)	(12/100%)
C. Local funding innovations such as corporate donations or educational partnerships. (SEE ATTACHMENT "7C" FOR COMMENTS)	(26/55%)	(17/36%)	(1/6%)	(16/94%)
D. Local resource reallocation to implement reforms.	(32/68%)	(11/23%)	(3/27%)	(9/82%)
E. Elimination of other programs in order to finance reforms.	(37/79%)	(6/13%)	(1/17%)	(4/67%)
F. Teacher salary increases.	(13/28%)	(30/64%)	(22/73%)	(17/57%)
G. State financial incentive programs for schools. (SEE ATTACHMENT "7G" FOR COMMENTS)	(27/57%)	(11/23%)	(9/82%)	(4/36%)
H. State or local financial incentive programs for teachers. (SEE ATTACHMENT "7H" FOR COMMENTS)	(30/64%)	(12/26%)	(8/67%)	(7/58%)

8. Since January of 1982, has your district expended any additional local funds beyond the previous year' base in order to *finance state mandated education reforms*?
No (21/45%) Yes (24/51%).
(SEE ATTACHMENT "8" FOR COMMENTS)

9. Since January of 1982, has your district expended any additional state funds beyond the previous year's base in order to *finance state mandated education reforms*?
No (16/34%) Yes (28/60%).
(SEE ATTACHMENT "9" FOR COMMENTS)

10. Have any of these reforms resulted in any measurable impact on the functioning of the schools?
No (16/34%) Yes (28/60%).
(SEE ATTACHMENT "10" FOR COMMENTS)

11. Have any of these reforms resulted in any measurable impact on the quality of instruction? No (17/36%) Yes (26/55%).
(SEE ATTACHMENT "11" FOR COMMENTS)

12. Have any of these reforms had any measurable impact on the performance of students as measured by student testing, classroom evaluations or other measurement techniques? No (14/30%) Yes (29/62%).
(SEE ATTACHMENT "12" FOR COMMENTS)

13. Were any of the reforms designed to contribute to area economic opportunity or economic development?
No (35/74%) Yes (7/15%).
(SEE ATTACHMENT "13" FOR COMMENTS)

14. Was your district involved in or aware of education reform measures being considered at the state level prior to enactment or adoption? No (11/23%) Yes (33/70%).
(SEE ATTACHMENT "14" FOR COMMENTS)

15. Did your district implement any changes in school policy or procedures designed to improve school operations or performance since January of 1982 which were later scaled back or abandoned?
No (37/79%) Yes 7/15%).
(SEE ATTACHMENT "15" FOR COMMENTS)

16. Did your district experience any difficulty in complying with state policies and procedures prior to January of 1982? No (30/64%) Yes (14/30%).
(SEE ATTACHMENT "16" FOR COMMENTS)

17. Has your district experienced any increased or decreased difficulties in complying with state policies and procedures since January of 1982? Increased difficulty (32/68%). Decreased difficulty (1/2%). No change (13/28%).
(SEE ATTACHMENT "17" FOR COMMENTS)

18. In your opinion, would you characterize as positive or negative the effects of state mandated or encouraged educational reforms implemented by your district since January of 1982 on :

Please circle the appropriate number.
(0 represents a neutral postion; -1 through -5 represent increasingly negative effects while +1 through +5 represent increasingly positive effects.)

A. Administrative staff:
- Changes in workload: -2
- Changes in turnover rates: 0
- Changes in responsibilities: -1

(SEE ATTACHMENT "18A" FOR COMMENTS)

B. Teachers:
- Changes in workload: -1
- Changes in turnover rates: 0
- Changes in responsibilities: 0
- Changes in percentage teaching outside of area of certification: 1

(SEE ATTACHMENT "18B" FOR COMMENTS)

C. Students:
- Changes in hours of instruction: 1
- Changes in attendance: 1
- Changes in student performance: 1

(SEE ATTACHMENT "18C" FOR COMMENTS)

Questionnaire Attachment "7C"

SPECIFY LOCAL FUNDING INNOVATIONS INPLEMENTED IN YOUR DISTRICT SUCH AS CORPORATE DONATIONS OR EDUCATIONAL PARTNERSHIPS:

Local Sales Tax Implemented in 1986.
Matching local funding for gifted and talented programs.
Lee County "Forward in the Fifth".
New York Times Grant for Early Childhood Education.
Educational partnership to install computers & train in their use.
Educational Foundation.
Local '83 & '86 sales tax to be used for Capital Improvements. We have formed a schools foundation.
$6 million bond for school facilities, Oct. 1987.
$3.5 million bond issue passed in November, 1987.
Increased millage for yearly budget.
Bonds & tax increases.
School bond issue to fund building program.
Annual increases necessary for mandates.
Business donations; county consortiums.
Started a foundation to assist some students' post-secondary education.
School-Business Partnerships.
School-Business Partnerships.
100% excess leave-2 years duration.

Questionnaire Attachment "7G"

SPECIFY STATE FINANCIAL INCENTIVE PROGRAMS FOR SCHOOLS THAT HAVE BEEN USED BY YOUR DISTRICT:

Educational Excellence Incentive Fund.
Innovative programs grants, Education Excellence Grants.
Innovative Incentative Grant for one year.
Three Educational Innovative Incentive Programs have been implemented.
Teacher salary increases every year since 1982.
14.7% state salary increase.
Salary increases annually - 25% over past 4 years.
Extra graduation requirements in mathematics for high school students.
Three year contract with employees-until 1990.
Contractual obligations to teacher union.
Each year salary Increase of 6.3%.
Career Ladder Program of merit pay for teachers.

Division of Vocational Education cuts - shifting to academic increases in diploma (math & science).
VA makes funds available to school systems at very low interest rates; there are also grants and a special category funds made available.
Divisions received state incentives for raising teacher salaries 10% annually.
Increased staff development funds. Reduction of certain staff to provide funding for reading specialist.

Questionnaire Attachment "7H"

SPECIFY STATE OR LOCAL FINANCIAL INCENTIVE PROGRAMS FOR TEACHERS THAT HAVE BEEN USED IN YOUR DISTRICT:

"Forward Fifth Incentive Grant Program," Innovative grants, Education Excellence Grants.
Economic Security Act, Traineeships for teachers on emergency certificates.
Must pass examination to receive raise.
Teacher attendance incentive program.
School improvement programs; staff development.
Merit pay for teachers - local.
VA mandates an average 8% raise for teachers in order for the county to receive money in certain categories.

Questionnaire Attachment "8"

SPECIFY ADDITIONAL LOCAL FUNDING EXPENDED TO FINANCE STATE MANDATED EDUCATION REFORMS:

More teachers required to cover reduced pupil-teacher ratio.
Teacher's Salaries, High School Textbook Program.
Additional local funds bonded for construction & additional power equialization funds spent on reforms.
Local revenues have been used to improve pupil/teacher ratios.
Student cap sizes in classes.
Didn't have enough money.
Textbooks, classroom size, others.
To raise salaries, provide duty-free lunch period for teachers; reduce class size Gr-K-8.
Kindergarten and school administration.
7% increase.
7% increase allowed by law, yearly.
Competency testing required by state mandate.
Statewide testing; competency based education.
Competency testing, gifted education, lower class sizes, course of study, writing, criteria for

new school evaluation methodology, library expansion, economics & reading at high school and junior high for certification.
New teacher induction.
Chapter 5 reguired courses offered, Aids education, alcohol & drug Education.
Gifted; Increased graduation credits.
Salary increases; visiting teacher mandate.
Gifted, special education, remedial, alternative education, drug education.
Some years yes, some years no.
Divisions received state incentive for raising teacher salaries 10% annually.
Reallocation of state funds to achieve reforms as mandated in areas of evaluation, instruction and effectiveness.

Questionnaire Attachment "9"

SPECIFY ADDITIONAL STATE FUNDS THAT HAVE BEEN EXPENDED TO FINANCE STATE MANDATED EDUCATION REFORMS:

State-ownd textbooks program, accreditation requirements, teacher-pupil ratio lowered, certification in-field, uniform school day, student testing programs.
The construction of a new middle school was required.
Each year the allocation changes - based on average daily attendence.
To meet requirements in science & math.
Free lunchroom periods, planning period for teachers.
Teacher's Salaries, High School Textbook Program.
State funds involved in construction. Other reforms partially directly funded by state.
Increases received to improve pupil/teacher ratio, implemented remedial programs for students who do not master essential skills, & employ Kindergarten aide.
Student cap sizes in classes.
Two new elementary teachers, three aides to meet class size reduction.
The "Remedial Program" funds, Education Innovation Incentive Fund; Educational Excellence Fund; funds for reducing class sizes.
To raise salaries, provide duty-free lunch period for teachers. To reduce class size Grades K-8.
Kinder Grant, Staff Development Funds, Drug-Free Schools Grant, NDN Title II, ARC Dropout Prevention Grant.
Aide program & Kindergarten program.
Cickasaw funds TVA in lieu of tax.
Facilities.
Implementation of Basic Education Program.
North Carolina Basic Education Program.
Reduce class size, New programs in Art, Music, Physical Education, 2nd language for elementary students, expanded math and science progs.
Special education program for hearing impaired and multiple handicapped students.

Money, time & effort.
Tells.
Increased graduation requirements.
Salaries, but local percent is 80%, state share is 20%
Gifted, Special Education, Remedial, Alternative Education, Drug Education.
Reallocation in areas of evaluation/curriculum/instruction/effectiveness.

Questionnaire Attachment "10"

SPECIFY HOW REFORMS HAVE AFFECTED THE FUNCTIONING OF THE SCHOOLS:

Uniformity of programs, courses, and time schedule have caused the system to operate more evenly and efficiently.
Class size reduction has not resulted in improvement on achievement tests.
Able to offer advanced placement courses.
Teachers have time to make lesson plans and personal time. I.E.P. Plans.
Class Cap Size - intent good, but harms child when splits, relocation to other schools occur throughout school year.
Smaller class sizes have had the most visible impact.
Though our test scores still lag behind, they have improved over 10% in the last 3 years.
There will be no local money to put into salaries this year.
Improve in the daily school attendence of students; Improvement in test scores - basic skills; reduced dropout rate.
State mandated Kindergarten - improved competency & attendence laws, dropout prevention program have had a positive impact. IMP, MTAI & staff development programs have had both positive & negative impacts.
Readiness for grade one and improvement of skills 1-4.
Increased availability of programs to students due to more personnel.
Lowered pupil-teacher ratio.
North Carolina Basic Education Program.
Greater availability of programs for students. Computer Assisted Instruction.
Reduced the class space available & reduced classroom teacher time due to intervention requirements for mainstreaming special education students.
Deficit cash flow.
Major change in schedule at JR. High.
Chpt 5; More academic subjects required to graduate; curriculum requirements have increased.
Unified activities/more staff development, increased post high school program enrollment.
Better teacher (selection) but nothing specific.
The students have received increased instruction & have been exposed to a wider variety of experiences. Increased test scores & improved public reaction.
Higher test scores, more pupils with more academic courses.

Many areas have improved though measurable data is scarce; i.e., course offeringsincrease, achievement test scores, ACT scores, college-bound seniors.
Difficult to tell. Test scores have improved.
Improved efficiency and attitudes toward accountability.

Questionnaire Attachment "11"

SPECIFY HOW REFORMS HAVE AFFECTED THE QUALITY OF INSTRUCTION:

Better test results. Both the state basic competency test for pupils in grades 3,6, & 9 &the state's high school graduation examination show improved academic attainment. The results on the SAT show steady academic growth of pupils.
Teachers always gave 110%- how can they do more?
C.T.B.S. Test scores, Individual needs are being met.
Emphasis on instruction beneficial; however, teacher-student interaction decreased due to strict time on task and focus on covering academic material. Socializing, thinking skills, creativity diminished. Teachers threatened - less teaching more paper pushing.
Our test scores are showing consistent improvement. Teacher evaluations show an improvement in instructional process. Mandated kindergarten showing an improvement in student-learning process.
The impact has been postitve, but this is difficult to measure other than through improved test scores.
Accrediation team visits, staff evaluations and other improvements have resulted in improved practices/planning. Results are reflected in improved test scores of students.
I am sure they have had an impact, but we have no means of measuring.
Student curriculum, MTAI & staff development have made all personnel more conscious of what is being taught & how - accountability. Reading assistants - great impact on instructional program in lower grades.
Improvement in student performance is evident.
Instruction is more organized.
Initial certification program has improved quality of teaching.
Improvement in Standardized Test Scores show we are measuring the same goals and objectives.
We are expanding programs in Physical Education, the Arts, and Second Language.
Reduced class sizes. New programs added.
Classroom time spent with regular education students has been reduced due to mandated mainstreaming of special education students.
In most cases, full impact has not been determined due to short time span of implementation.
Unable to measure.
TELLS Testing, New teacher induction.
Chapter 5; More academic subjects required to graduate; curriculum requirements have increased.

Testing measurement ratio, reading/math-State wide testing documents.
Local reform - Effective Teaching Program - resulted in much improvement in quality of teaching; increase in test scores.
The quality of instruction has improved as evidenced by the various approaches tried by personnel after extensive staff development.
Teachers are more aware of the need for students to be better prepared to go to college.
Only staff development initiated locally can improve instruction. Raising teacher salaries does not improve instructional quality.

Questionnaire Attachment "12"

SPECIFY HOW REFORMS HAVE AFFECTED STUDENT PERFORMANCE:

Pupil test scores have increased showing that the quality of instruction has been improvedin the past few years. The performance improvements are due to more uniform standards being applied in our schools as a result of the state's plan for excellence.
Our students do not do any better that in previous years. They have always done well.
ACT test scores have gone from 14.4 to 18.0 in five years.
Test scores have risen each year.
Our system has always done a good job and had good student performance. Changes have been minimal in our district. Emphasis on test scores has pressured some low ranking districts into "teaching the test". This hurts the entire evaluation process.
Our test scores are showing consistent improvement. Teacher evaluations show an improvement in instructional process. Mandated kindergarten showing an improvement in student-learning process.
The impact has been postitve, but this is difficult to measure other than through improved test scores.
Student test scores have increased.
Kentucky Essential Skills Test (KEST) & others.
The average test scores have improved as measured by KEST.
No evidence.
Increase on BSAP & FLE scores annually. MTAI impact on teacher as to how student perceives teaching techniques. Districtwide IMP & St Curric. insured students taught object to which are held account. Reading assist. improved test scores in lower grades.
Long range testing has not been done. Howéver, improvement is evident.
ACT Scores up somewhat; insufficient data for other quantification.
Most improvements are only in their first year.
Scores have improved.
Too early to measure.
Achievement scores have improved each year.
We have observed a slight decline in average student performance during the past two years as measured by the Stanford Achievement Test.
Computer use has greatly enhanced instruction with "at risk" students in lower elementary

grades.
We feel that individual classroom instruction has improved.
TELLS - improvement, Test of Essential Language and Library Skills.
Student performance has improved.
Increase in student performance measures in math/reading.
Increase in test scores.
In each instance stated, the students have received increased instruction and have been exposed to a much wider variety of experiences. The measurable impact shows up in increased test scores and improved public reaction.
Higher scores.
Our local evaluation of standardized tests may improve student performance.
Many areas have improved though measurable data is scarce; i.e., course offeringsincrease, achievement test scores, ACT scores, college-bound seniors.

Questionnaire Attachment "13"

SPECIFY HOW REFORMS WERE DESIGNED TO CONTRIBUTE TO AREA ECONOMIC OPPORTUNITY OR DEVELOPMENT:

Alabama's Department of Education was made aware in the early '80's through the Tennessee experience with the Saturn GMC plant that education reform would brighten the state's chances of attracting industry.
The intent of the whole Reform Act was to improve the economic opportunity of our citizens. However, I cannot specifically pinpoint and particular parts of the reform designed specifically for this.
A new vocational complex has been built.
Development of vocational education for district students. Obvious improvement in work entry level skills.
We assume that the better the educational offerings, the more enticing the area will beto prospective businesses. This will contribute to the economic development.
Alternative education programs established - drop-out prevention, work-study programs, school-business partnerships.

Questionnaire Attachment "14"

SPECIFY HOW YOUR DISTRICT WAS INVOLVED IN OR AWARE OF STATE EDUCATION REFORM MEASURES BEING CONSIDERED PRIOR TO ADOPTION:

Our State Department of Education held district meetings all across the state to introduce proposals for legislative consideration.
Very aware of QBE.
Committee meetings, news media, communications from State Department of Education,

conferences.
Local state representative was a leader in reform package.
News, media, information sent to us by State Department of Education.
Little local district input was asked of districts.
Made aware via state educational agencies/organizations and communication with state legislators.
Though KSBA and KASA.
Media school (education) groups & publications
Aware due to discussions in in-service workshops and through committee involvements.
Our district makes every effort to stay in contact with legislators and informed of proposed legislation.
We were not involved (included) prior to enactment or adoption. However, we were aware of some of the reform measures but did not realize the extent of the impact that the Education Reform Act would have on poor rural districts.
Contact with the State Department of Education.
We have provided input from the local level.
Different personnel were involved on State Task Forces.
OSBA, BASA Newsletters, conferences, hearings & meetings. State Board of Education member.
By membership in professional organizations and legislative awareness.
Hearings throughout the State.
State Bulletins, announcements, regional meetings.
We were told when the reform was to be implemented.
4 Years of pre-school, 2 years kindergarten, elementary guidance.
We served on various committees to offer input.
Served on state committee. Input in policy before implementation.

Questionnaire Attachment "15"

SPECIFY ANY REFORM POLICIES OR PROCEDURES WHICH WERE LATER SCALED BACK OR ABANDONED:

The Career Incentive Program (merit pay plan for teachers) was abandoned because no one liked the system of evaluations and money was not available to fund the program.
Consolidation was considered to meet accreditation requirements but after public hearings were held and accreditation standards were changed, this was abandoned.
Student Absentee Policy.
Reorganization of all the district schools was tabled because a bond referendum was defeated.
Grade by grade achievement testing was scaled back due to cost.

Questionnaire Attachment "16"

SPECIFY ANY DIFFICULITES IN COMPLIANCE WITH STATE MANDATES PRIOR TO JANUARY OF 1982:

We had occasional problems but not as pronounced as the present policies.
As a growing district we have long had a problem providing adequate facilities.
Lack of state funds for high school textbooks & free textbooks for indigent children has placed the burden of purchasing on the district. The cap size w/no flexibility has made it hard to staff the schools. In order to comply, we have had to overstaff.
Meeting class size requirments placed additional burden on finances and were difficult to implement because of lack of building space.
Finances - lack of funds to implement.
No problem that could not be handled, but we did have problems.
Vocational standards were a problem prior to 1982.
Very poor district - having difficulty meeting all mandates.
Most reforms required financial obligations. This was acheived by re-allocation of funds rather than the availability of additional funds. This reallocation results in some other areas being reduced.
Obtaining necessary funds has been a problem.
Substandard school buildings. Many were closed which forced us to find other space.

Questionnaire Attachment "17"

SPECIFY DIFFICULTIES IN COMPLIANCE WITH STATE MANDATES SINCE JANUARY OF 1982:

Mandated changes have come about much faster than funding necessary to carry out the changes.
Not enough space or money.
Money is needed to fully implement.
Too many mandates, policies, etc. with little or no funding to implement programs.
Group size mandates very inflexible.
There is practically no flexibility in pupil/teacher ratios which presents serious staffing problems in small schools.
More local expenditure of funds.
Teacher salaries are suffering in relation to other larger school districts.
Class size mandates were hard to follow. We had to employ a teacher because there were 2 kindergarten children over cap size. The following month 3 moved away. This little district didn't have the money for an extra teacher.
Meeting class size requirments placed additional burden on finances and were difficult to implement because of lack of building space.

New teacher certification requirements - some of the new Performance Based Accreditation Requirements-1) teacher preparations-2) student/teacher ratios (number students) 3) legality of graduation requirements.
More complicated and expensive.
With the advent of the Basic Education program, our county has seen more difficulty in meeting all of the new rules.
Due to our particular organization and the allotments the state is using, it will be difficult for us to comply with the guidelines of the Basic Education Program unlesswe have additional help.
It has been very difficult addressing the needs of special educadtion students because requests for unit allocations that are desperately needed have been turned down by the State Department of Special Education.
Lack of available resources. Lack of state funding.
C.B.E. has caused a tremendous amount of extra difficulties.
Certification is more difficult. Demands have been made on our limited facilties. Testing has added a great burden on time & finances. A lot of staff time is being expended on other items.
Implementation of additional program requirements without additional administrative help.
Funds too small to cover actual expenses of mandated change. Lack of space for additional program requirements.
Time limits to begin implementation are unrealistic. Changes should be thought out before they are mandated.
Increased work load; increased funding needed.
More state requirements-without sufficient funding support from state & federal.
Some programs have been mandated but not fully funded.
Increased funding to keep up with mandates.
Requirements are constantly increasing. Additional reforms will require additional monies.
Funding has not been adequate.
Pupil/teacher ratios.
Legislative action has made our role much more restrictive.
Better informed staff. Emphasis on compliance with state regulations.

Questionnaire Attachment "18A"

SPECIFY IMPACT OF EDUCATION REFORMS ON ADMINISTRATIVE STAFF:

Work load increased tremendously for administrators.
Paperwork has increased tremendously.
Some positive benefits are ascertained. The work load has been almost impossible with just 5.5. Administrative staff.
Level of staffing has decreased while programs have experienced continual growth.
More paper work.
All additional mandates implemented with no additional staff.
The changes have caused a great increase in the workload of administrators.

Questionnaire Attachment "18B"

SPECIFY THE IMPACT OF THE REFORMS ON THE TEACHERS:

Lateral entry programs have helped combat the teacher shortage.
Mandated documentation for coRrelation between lesson plans and course of study have increased teacher workload and responsibility.
Good teachers are leaving because they can't find time to teach.
The changes have caused a large increase in the workload of the teachers.

Questionnaire Attachment "18C"

SPECIFY THE IMPACT THE REFORMS HAVE HAD ON THE STUDENTS:

No Change.
Less teaching time due to increased demands for teachers to document nearly every aspect of their work in order to be covered in case of liability lawsuits.
The state seems to add on to the curriculum, but never seems to take away. Consequently, the content depth shrinks and the curriculum continues to be watered down.

Appendix 5

STATE OFFICIALS INTERVIEW GUIDE

BACKGROUND:

* Purpose of ARC study: to provide a comprehensive report on the implementation of educational reform in small, rural[1] school districts in the Appalachian Region and to determine what is different in rural schools as a result of reform activities.

* Portions of study completed to date:
  - Inventory of education reforms that have been implemented in your state since January of 1982 (enacted by the legislature, or adopted by the State Board of Education); and,
  - Distribution of a questionnaire to 114 rural districts in the region.

* Now interviewing state officials. Finally, we will select 4-6 local school districts in the Region as case studies.

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[1] NON-METRO SMALL CENTERS: These counties either have concentrations of employment equal to 85% or more of the number of resident workers and urban centers of less than 10,000 population, or where the E/R ratio is 1.20 or greater.
NON-METRO RURAL: Thirty counties which have urban places (all under 3,500 population) each having less than 20 percent of the county population.

PERSON INTERVIEWED: _____
TITLE: _____
NAME OF INTERVIEWER: _____
DATE OF INTERVIEW: _____

INTERVIEW QUESTIONS:

1. In your opinion, have the course offerings of rural school districts changed as a result of education reforms implemented in your state since January of 1982? ___ Yes; ___ No. Please explain: _____

2. Since January of 1982, have rural school districts been required to expend any additional **local** funds beyond the previous year's base in order to *finance state mandated education reforms*? ____ Yes ____ No. If yes, specify. _____

3. Have any of these reforms resulted in any measurable impact on the administration of the small and rural schools? ___Yes ___No. Specify what improvements if any have resulted from each reform or what negative impact, if any, each reform may have had on the functioning of the schools._____

4. Have any of these reforms resulted in any measurable impact on the quality of instruction? ___Yes ___No Specify what improvements if any have resulted from each reform or what negative impact, if any, each reform may have had on the quality of instruction. Indicate how the improvement or adverse effect is measured. _____

5. Have any of these reforms had any measurable impact on the performance of students as measured by student testing, classroom evaluations or other measurement techniques? ___Yes ___No Specify what improvements, if any, have resulted from each reform or what negative impact, if any, each reform may have had on the quality of instruction. Indicate how the improvement or adverse effect is measured. _____
_____
_____
_____
_____
_____.

6. Were any of the reforms designed to contribute to area economic opportunity or economic development? ___Yes ___No If yes, explain the nature of the reform and its impact - that is, whether students are better prepared for the transition to work as a result of the reform. _____
_____
_____
_____
_____
_____.

7. Were small, rural school districts involved in or aware of education reform measures being considered at the state level prior to enactment or adoption? ___Yes ___No Please specify the nature of their awareness or involvement. _____
_____
_____
_____
_____
_____.

8. Did your state implement any changes in school policy or procedures designed to improve school operations or performance since January of 1982 which were later scaled back or abandoned? ___Yes ___No Specify the nature of the change and the reason for its later modification or elimination. _____
_____
_____
_____
_____
_____.

9. Did small, rural school districts experience any difficulty in complying with state policies and procedures prior to January of 1982? ___Yes ___No If the answer is yes, specify the area or areas of compliance which posed the problem for the small, rural districts and the reason(s) for the difficulty. _____
_____
_____
_____
_____
_____.

10. Have small, rural school districts experienced any increased or decreased difficulties in complying with state policies and procedures since January of 1982? ___Increased difficulty. ___Decreased difficulty. ___No change. Please specify the nature of the change if any. _____
_____
_____
_____
_____
_____.

11. Have there been any unintended consequences of the reforms, particularly as they relate to small, rural school districts? _____
_____
_____
_____
_____
_____.

12. Have any of the reforms resulted in any change in public attitudes toward schools, particularly in small, rural school districts? _____
_____
_____
_____
_____
_____.

13. In your opinion, would you characterize as positive or negative the effects of state mandated or encouraged educational reforms implemented in small, rural school districts since January of 1982 on :

Please circle the appropriate number.
(0 represents a neutral position; -1 through -5 represent increasingly negative effects while +1 through +5 represent increasingly positive effects.)

A. Administrative staff:

Changes in workload:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5
Changes in turnover rates:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5
Changes in responsibilities:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Comments: _____
_____
_____

B. Teachers:

Changes in workload:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5
Changes in turnover rates:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5
Changes in responsibilities:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5
Changes in percentage teaching outside of area of certification:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Comments: _____
_____
_____

C. Students:

Changes in hours of instruction:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5
Changes in attendance:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5
Changes in student performance:	-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Comments: _____
_____
_____

14. Which small, rural school district in your state has done/is doing, in your opinion, the best job of implementing the reforms? _____. Which small, rural school district is experiencing the most difficulty in implementing the reforms? _____. (The purpose of this question is only to help identify the school districts for case studies.)

15. What major changes is the state now considering in order to further enhance learning and the educational system in your state? _____
_____
_____
_____
_____
_____.